



**Maternal and Child Health Services
Title V Block Grant**

**State Narrative for
Puerto Rico**

**Application for 2011
Annual Report for 2009**



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I. General Requirements

A. Letter of Transmittal

The Letter of Transmittal is to be provided as an attachment to this section.

An attachment is included in this section.

B. Face Sheet

The Face Sheet (Form SF424) is submitted when it is submitted electronically in HRSA EHB. No hard copy is sent.

C. Assurances and Certifications

By signing the SF424 Form and submitting the Title V Block Grant (BG) Application for 2010-2011, the Puerto Rico Department of Health (PRDOH) is committed to comply with all requirements established by OBRA'89 (PL 104-193, 1996). Funds allotted to PR will only be used for addressing the identified needs of women in their reproductive age, their infants, children and adolescents, including those with special needs and their families; and for the proper management and implementation of the action plan as described in the application. The allotted funds will be fairly distributed across all geographical areas for the different MCH population groups in accordance to the mandate (30-30-10).

Under any circumstance the Title V Block Grant funds will be used for construction or the purchase of land.

We will comply with all applicable requirements of other federal laws, executive orders, regulations and policies governing this program.

The undersigned agrees that the PRDOH will comply with the Public Health Service terms and conditions if the grant is awarded as a result of the submitted application.

Additionally, we certify that services will be rendered in a smoke-free environment, to provide a drug-free workplace in accordance with 45 CFR Part 76, and to comply with the prohibition of using federal funds to support any activity regarding lobbying or its appearance to.

An attachment is included in this section.

D. Table of Contents

This report follows the outline of the Table of Contents provided in the "GUIDANCE AND FORMS FOR THE TITLE V APPLICATION/ANNUAL REPORT," OMB NO: 0915-0172; published March 2009; expires March 31, 2012.

E. Public Input

Public input was obtained from a wide array of stakeholders including, but not limited to, women of child bearing age, adolescents, front line providers (home visiting nurses and community health workers), regional MCH staff, OB and other perinatal providers, neonatologists, pediatricians, neonatal and maternal-fetal nurses, infant and maternal mortality committee members, and positive youth development model committee members, collaborators from other agencies and programs serving the MCH population, professional organizations, members of the Healthy Start Consortium and MCH Regional Boards, on a regular and ongoing basis. Other important public input is feedback from HVP participant committee, Youth from the Positive Youth Development Committee. An ad was published on May 26 and 28, 2010 in two newspapers of wide circulation in the Island, "El Nuevo Día", and "El Vocero ", requesting input from the general public. A copy

of the application and the Needs Assessment was placed in the seven MCH regional offices located at Aguadilla-Mayaguez, Arecibo, Bayamón, Caguas-Humacao, Fajardo, Ponce and San Juan. People interested in reviewing and submitting recommendations had the opportunity to do so during June 1-4, 2010. Written recommendations were due June 11th, 2010. A notice was also posted on the PRDOH web page on May 27, 2010.

One person reviewed the proposal but did not submit written recommendations.

Please see Methodology of the Needs Assessment, Section II for more details.

II. Needs Assessment

In application year 2011, the 2010 Needs Assessment will be attached to this Section II.

An attachment is included in this section.

C. Needs Assessment Summary

The Puerto Rico Division of Mothers, Children and Adolescents (PRMCH) performed a comprehensive needs assessment of the MCH populations and the capacity the system has in meeting their needs. The needs assessment has been an on-going process built upon existing formal and informal collaborative efforts that facilitated data gathering. The guiding principle underlying the needs assessment process was to focus on a strength health promotion approach rather than on a deficit-oriented approach.

The 2010 PRMCH needs assessment departs from the previous 2005 in several important aspects. In first place, in depth qualitative methodology was added as an important dimension in data gathering and analysis to fill an existing gap about the views and experiences of beneficiaries (MCH populations) and health service providers.

Secondly, widely engaging stakeholders (other than CSHCN families) at every stage of the process was also included in this needs assessment. Three types of stakeholders were consulted: 1) PRMCH staff from the Central and Regional levels; 2) Representatives from collaborating organizations involved in PRMCH sponsored boards and/or committees and: 3) Participants (pregnant women, reproductive age women, adolescents and families) of three MCH programs, namely the Home Visiting, Healthy Start and the Youth Health Promoters.

In third place, a three phase framework was developed to assure a comprehensive process of identification of needs, setting priorities and adopting measures to monitor improvement. These phases are:

1. Assessment of the Needs of MCH population groups. This phase involved the collection and analysis of both quantitative and qualitative data for each MCH population groups.
2. Assessment of the Capacity of the System to meet MCH population needs. This phase involved the evaluation of the capacity of the broader system to meet the identified MCH population needs, as well as identifying the strengths and challenges faced by PRMCH in relation to the core MCH functions. Included in the capacity assessment is the identification of principal services by pyramid levels from a variety of programs and initiatives that address issues pertaining to MCH populations.
3. Setting potential priorities based on the assessment of needs and capacity. This entailed narrowing potential needs priorities and matching needs to capacity, setting targets, identifying activities and/or actions and allocating resources. As part of this phase, PRMCH convened a group of stakeholders to work together in a two-day long consensus meeting to narrow potential priorities, assess resources available, and suggest strategies to meet needs and/or problems. The selection of potential priorities was through a designed instrument that was given to stakeholders and staff members from the MCH Program considering the following criteria: the extent/magnitude of the health problem, severity of the consequences, resources availability, and level of public acceptability.

This three-phased framework provided a structure that enabled PRMCH to determine the priorities needs and develop new state performance measures to monitor health status. The 10 needs priorities selected and the state performance measures are the following

1. Improve WRA health at the time of conception. A new SPM was chosen, the proportion of childbearing age women consuming folic acid. The last SPM, prevalence of neural tube defect (NTD) will remain.
2. Develop continuous and reliable data sources and surveillance systems. A new SPM was developed to assure continuous availability of data reports regarding the health of MCH populations. Characteristics and criteria for evaluation have been set.
3. Decrease premature births. Since premature births and low birth weight babies are the first cause of infant mortality a new SPM will measure this priority. The SPM (4) is late pre-term babies.
4. Decrease morbidity due to chronic conditions in the pediatric population. Dental cavities, overweight/obese children and asthma were considered under this priority. PM 9 measures the percent of children who have received protective sealants on at least one permanent molar tooth and PM 14 measures the percentage of children ages 2-5 receiving WIC services with a Body Mass Index at or above 85th percentile. There is a Healthy System Capacity Indicator that measures the rate of children hospitalized for asthma.
5. Reduce unintentional injuries among children and adolescents. There are PM (10) and HSIs (3 and 4) to measure success in meeting this priority. In addition, a new SPM (5) will measure the rate of children aged 1 to 14 years that visit emergency rooms due to all unintentional injuries. through several initiatives, the PRMCH expects to reduce the number of emergency room visits among children aged 1 to 14 due to all unintentional injuries. In addition, a new SPM (No. 5) will measure the rate of emergency room visits due to all unintentional injuries among children aged 1 to 14 years.
6. Strengthen the socio-emotional development in the pediatric population. Maltreatment, mental health and behavioral problems are emerging issues in this population. A new SPM will measure the number of pre-scholars presenting behavioral problems.
7. Promote healthy life style in adolescents. Two new SPMs (7 and 8) will measure success: 1) Degree to which organizations incorporate Positive Youth Development Model in their programs; 2) Percent of youth aged 10-19 adopting physical fitness, healthy food, safe sexual practices, and smoking, alcohol, and drugs cessation
8. Increase the number of empowered CSHCN families by promoting family competency to identify and manage their child needs through family centered-care.
9. Increase the number of CSHCN that receive coordinated care services.
10. Increase the number of YSHCN that are well oriented for their transition to adult life.

III. State Overview

A. Overview

Geography and Political Context

Geography: Puerto Rico (PR) is a Commonwealth of the United States (US). It is the smallest of the Greater Antilles islands located in the Caribbean, about 1,000 miles southeast of Miami and 80 miles west of the US Virgin Islands. The Island is 100 miles long and 35 miles wide for an approximate area of 3,500 square miles. Puerto Rico has four main offshore islands -Vieques and Culebra to the east, and Mona and Desecheo to the West. Mona and Desecheo are deserted islands. The people of Vieques and Culebra have to travel to PR in small planes and boats in order to access secondary and tertiary health care as well as other human services.

The Dominican Republic, another of the Greater Antilles islands, is located west of Puerto Rico. Our proximity allows for mutual tourism and the sharing of economic and cultural resources. However, it also allows the entry of a significant number of legal and illegal immigrants affecting our health care systems as well as our health indicators.

Geographically, the Island is divided in 78 jurisdictions known as municipalities, each headed by a mayor who is elected every four years. The largest municipalities in Puerto Rico are San Juan, the capital; Bayamón, Carolina, Caguas, Arecibo, Mayaguez and Ponce.

The climate of the Island is a tropical maritime one, with an average high temperature of 86 degrees (F) and a low average temperature of 66.9 degrees (F). The Atlantic Ocean borders the North of PR and the Caribbean Sea borders the South Coast. Due to its location in the Caribbean, PR is highly vulnerable to the strike of hurricanes.

Political Context: Puerto Rico has been part of the United States since the end of the Spanish-American War (1898), and became a commonwealth in 1952. Politically, the Island resembles the 50 states. Every four years, the people of Puerto Rico elect a governor, 28 senators, and 51 House members to serve in the local government. Puerto Rico's voters also elect a nonvoting delegate to the US House of Representatives.

The United States maintains control over Puerto Rico's military defense, transportation, immigration, foreign trade, and many other areas of governance. Puerto Rican residents contribute to Social Security, serve in the US military, and can be called for military service. They do not pay federal income taxes and do not vote in US residential elections. Puerto Ricans are eligible to participate in federal government programs, but levels of assistance are typically lower than those provided for people living in the 50 states and the District of Columbia. As an example, in CY 2009 the Temporary Assistance for Needy Families (TANF) Program provided an average monthly payment of \$112.90 to families in Puerto Rico, which represents a 54% increase when compared to the same parameter in 2004-2005 (\$73.30). In 2009, the maximum monthly TANF payment for a family of three -the average size of TANF families -with no income ranged by state from \$185 to \$923.

There are several other federal programs in addition to TANF that provide support for low-income children and families in Puerto Rico, including nutritional assistance programs, Head Start, Job Corps, and school lunch programs. Residents of Puerto Rico are not eligible to receive Supplemental Security Income. Besides, since they do not pay federal income taxes, they are not allowed to receive the Earned Income Tax Credit, which is an important source of support for many low-income working families in the United States.

Economic Profile: Sixty years ago, Puerto Rico was mainly a rural island where most people made a living as farmers. Since becoming a commonwealth, Puerto Rico has developed closer economic ties with the United States, with increasing revenue from industry, agriculture, and tourism. While US median household income increased by 7% between 1989 and 1999

(adjusting for inflation), median household income during that period in Puerto Rico increased by 24%.

Nevertheless, income levels in Puerto Rico still are far behind those in the rest of the United States. Median household income in the Island in 2008 was \$18,401. To compare, although Mississippi's median household income (\$37,790) was the lowest among the 50 states, it was still twice as high as the median income in Puerto Rico. Maryland's median household income at \$70,545 was the highest of the 50 states and was almost four times higher than the median income in Puerto Rico. Hispanic/Latino households in Mississippi had a median household income of \$37,420, which is still more than three times the median income in Puerto Rico. Regarding the level of poverty, it declined from 58.9% in 1990 to 48.2% in 2000. The number of families under the poverty threshold decreased from 55.3% to 44.6%. In 2005, the level of poverty was 44.9% according to the Puerto Rico population estimate, while the number of families under the poverty threshold level was 41.1%. By 2008, the population estimate for the Island showed a level of poverty at 45.5%; the number of families under the poverty threshold remained the same as in 2005 (41.1%). However, we must keep in mind that the economic decline since 2000 and the resulting governmental measures to cope with it have placed an additional burden on the Island's constrained resources.

During the past five decades, the PR economic cycles paralleled those in the US economy. Yet, in 2005 local economists acknowledged that PR was in a recession due to the downward trend in the Island's economy. During the 2004-2008 period the executive and legislative branches (each one controlled by an opposing political party) of the government in PR attempted to reach a consensus agreement to solve the financial crisis that the Island was facing at the time. A fiscal and financial reform was proposed to cope with the large budget deficit, rising government costs and reduced profits. Government officials took drastic steps to reduce government costs that included cost-containing measures such as hiring restrictions, reorganization and consolidation of government agencies, and a radical reduction in funds available to maintain services at current levels. The situation became worse due to reductions in the amount of federal funds made available to PR. During this period over 100,000 direct and indirect jobs were lost. In 2008 our economy grew at a negative rate of -1.3%. According to experts, some of the factors that contributed to this recession are: the repeal of the 936 tax exemption status for investors doing business in PR, increasing fuel costs, increases in charges for basic utilities, the approval of a 7% local consumption tax. Also, another negative factor was a government strongly divided across party lines that interfered with the approval of an economic stimulus package by the PR Legislators.

In 2008, a new government was elected in the ballots, with the winner political party in control of both executive and legislative branches. To deal with the financial crisis in the Island, the government adopted extreme measures, the most impacting one being the enactment of Law No. 7 of March 2009 which mandates, among other measures, the reduction of governmental budget by elimination of staff in public agencies with transitory positions and permanent personnel with less than 5 years in the workplace. This represented a loss of about 16,970 jobs by November 6, 2009 and may constitute a probable overall loss of nearly 30,000 employees in the next 2 years. Reorganization and consolidation of government agencies has continued.

Population

Puerto Rico constitutes one of the most densely populated areas of the world. Currently, the Island ranks 27 in population size when compared to all other states in the USA. According to the Census Bureau there were 3,808,610 people living in PR in 2000. In 2008, the Puerto Rico Community Survey reported 3,954,037 persons living in the Island, an increment of 3.8%. To this number we add a population density of 1,155 people per square mile, similar to the population density of New Jersey which is the most densely populated state (1,181 people per square mile). Over 90% of the population resides in the urban areas, reaching figures close to 9,000 per square mile.

The Puerto Rican population is fairly homogenous. Among PRCS participants in 2008, 99% responded they considered themselves Hispanic and only 3% were foreign born.

General Trends

Puerto Rico has increased its population during each decade since the first US census was conducted in 1899, when there were nearly 1 million people living in the Island. Fifty years later (1950) the population had more than doubled, reaching 2.2 million. However, the population growth in the Island has slowed during the past 60 years, mainly due to increased migration from Puerto Rico to the US mainland and a decrease in fertility levels. From 1970 to 1980, the Island's population increased by 18%, followed by a 10% increase during the 1980s. An 8% increase during the 1990s brought the total population to 3.8 million. For 2000, the population was 3,808,610. By 2008, there were 3,954,037 persons living in the Island (Figure III-1). This represents a 3.8% increase in the Island's population in eight years. In the United States during the 2000s there was 8% increase in the population. For 2008 the MCH population comprised 49% of the PR Population (1,937,412 of 3,954,037).

The Puerto Rico population pyramid has a narrowing or contraction base, which reflects lower percentages of younger people. The percent of the population comprised of children 0-19 years old continues to decrease, from 32% in 1990 to 27.9% in 2008. Specifically, 28.5% (1,126,490) were women in their reproductive age (10-49 years old) and 20.5% (810,922) were children 0-19 years old in Puerto Rico. In 2000, about 27% of families with children in Puerto Rico were headed by a female householder. By 2008, we estimate that 34% of families with children in Puerto Rico were headed by a female householder with no husband present. This represents a 26% increase over the share of female-headed families with children in 2000 and is higher than the US average. In the United States, the share of female-headed families increased from 8.3% in 2000 to 12.5% in 2008.

At the turn of the 20th century the population under age 18 increased from less than 500,000 to 1.1 million in 1950. The child population increased slightly each decade during the 1950s, '60s, and '70s, but then had a downward trend from 1.2 million in 1980 to 1.1 million in 2000. Between 1990 and 2000, the number of children in Puerto Rico decreased by 5%, compared with a 14% increase in the United States. By 2008 the children's population in Puerto Rico had decreased to 982,276 (10%) when compared to 2000 (1,092,101). Therefore, the number of children living in Puerto Rico today is less than to the number of children living there in 1950. Despite the recent drop in the population under age 18, the number of children in Puerto Rico has more than doubled during the past century.

The proportion of children in the population has also decreased in recent decades. Between 1899 and 1960, the percent of children remained constant at about 50%. However, since then, a steady decline in the percentage of children has followed, from 43% of the population in 1970 to 28% in 2008 (Figure III-2). This last number is only slightly higher than the percentage of children in the United States (27.3%). The long-term drop in the proportion of children in Puerto Rico's population is a sign of an increase in the number of adults relative to the child population rather than a significant decrease in the number of children.

The drop in the proportion of people under age 18 has been determined by two main factors. First, there has been a long-term decline in fertility rates in Puerto Rico. In 1950, the fertility rate in Puerto Rico was 5.2 births per woman. By 1970, it had fallen to 3.2 births per woman, and by 2000 it had dropped to 1.9 births per woman. The 2000 fertility rate in Puerto Rico was slightly lower than the rate in the United States as a whole (2.1 births per woman) and was substantially lower than the rate for US women of Puerto Rico descent (2.6 births per woman). By 2006 the fertility rate had descended to 1.7 births per woman followed by 1.6 in 2008 (Birth Certificates). Increasing levels of female sterilization in the 1950s and 1960s have been associated with the drop in fertility rates in Puerto Rico during those decades. Also, a rising age at marriage and an increase in the use of oral contraceptives have contributed to the decline in recent years, but sterilization continues to play a key role. The estimated percentage of married women in Puerto

Rico who have been sterilized (46%) is higher than that of any other country for which we have data.

Second, many young Puerto Ricans and their families have moved to the US mainland in search of greater job opportunities and higher wages. Between 1995 and 2000, more than 100,000 people age 5 and over moved from Puerto Rico to the US mainland. During the 1990 to 1999 period some 325,875 persons migrated. Between 2000 and 2007 about 359,000 persons moved to US mainland.

The observed decline in the number of children in Puerto Rico may be the result of this relatively high level of emigration either through the relocation of parents with their children to the US mainland or of people of reproductive age, which may reduce the number of potential births that occur in the Island.

There are now close to four million Puerto Ricans living stateside (the so called Diaspora) with reports that this number exceeded the number of the population in Puerto Rico for the first time in 2003. Despite the new demographic trends, New York City continues to be the home of the largest Puerto Rican community in the United States with Central Florida having the second largest Puerto Rican community, but Puerto Ricans live in all 50 US states and territories, including large numbers in New York, Massachusetts, Connecticut, Illinois, Ohio, New Jersey, Florida, Pennsylvania, and Texas. Some of the strong presence of Puerto Ricans in Hawaii, Arizona, and California is due to previous generations of Puerto Ricans moving to those states in the early 20th century to fill positions as farm laborers. Today they are filling professional positions within the Federal Government, including, NASA, DOD, US Customs and within the private sector. Puerto Rico has become an important source of professionals in many engineering fields, medical profession and other top notch positions in America. The adverse side of this relocation of professionals to the US Mainland has caused a dramatic drain of highly educated professionals from the island of Puerto Rico.

Female-Headed Families

Family structure has important implications for children. Youngsters growing up in single-parent families typically lack access to the economic or human resources available to children growing up in two-parent families. While local social and cultural norms may influence the situation for children living in single-parent families (for example, they may benefit from extended family support), children in the Island growing up in single-parent families face an economic disadvantage when compared to children growing up in families with both parents present in the household. In 2000, nearly 27% of families with children in Puerto Rico were headed by a female householder. In 2008, we estimate that this rate increased to 34%. As stated before, this represents a 26% increase over the share of female-headed families with children in 2000 and is higher than the US (27.3%).

In the United States, the number of single-parent families has risen dramatically over the past two decades, causing considerable concern among policymakers and the public. The percent increased from 22% in 1990 to 27% in 2000. This suggests that the increase in female-headed households in Puerto Rico followed a trend seen throughout the United States.

By 2005, nearly 32.6% of married-couple families with children under 18 years old and 57.8% of female-headed families with children were living in poverty. In 2008, about 34.0% of married-couple families with children below 18 years of age were living in poverty, while 67.8% of female-headed families with children were living in poverty. As a comparison, in mainland United States, about 6.5% of married-couple families with children and 36.3% of female-headed families with children were living in poverty in 2008.

In Puerto Rico, it is culturally accepted for grandmothers to assume the care of their grandchildren when their mothers are unable to take care of their offspring. By 2008, nearly 14.6% of children in this age range in the Island were under the care of their grandmothers.

Poverty

More than half of the children in Puerto Rico (58%) in 1999 were living in families with incomes below the poverty line. The Island's child poverty rate was more than three times higher than the child poverty rate in the United States mainland (16%). American Samoa was then the only US state or territory with a higher child poverty rate (67%) than Puerto Rico.

However, during the 1990s, the poverty levels in Puerto Rico, although usually quite high, declined significantly as a probable result of the unprecedented economic growth in the United States. The number of children in Puerto Rico living in families with incomes below the poverty line has decreased from 626,521 in 1999 to 434,403 in 2008.

The percentage of children living in poor families has also decreased, from 58% in 1999 to 56.4% in 2008. In the United States, the child poverty rate dropped from 18% to 16% during the 1990s but for the 2000s the percent began to increase registering 18.2% for 2008.

The number of families living below the poverty line also declined, from 450,254 in 1999 to 393,315 (32.6%) in 2005 and 362,789 in 2008. However, the number of female-headed families living in poverty increased by 8.5%, from 159,205 in 1999 to 172,721 (58.6%) in 2008.

According to data provided by the Puerto Rico Community Survey (PRCS), children and their families living in Puerto Rico face economic difficulties. In 2006 Puerto Rico ranked #1 in the nation in percent of children under 18 years old below poverty level in the past 12 months (for whom poverty status is determined). Two years later (2008) the pattern continues. The rate for PR increased from 56.3% in 2006 to 56.4% in 2008. Both rates compared adversely with the national rate of 18.2% in 2008. The 2008 PRCS also reports 44.6% of children live in households that received public assistance in the past 12 months, such as cash public assistance income or Food Stamp benefits. In 2008, people living in poverty comprised 44.8% of the population. The median household income in the past 12 months was \$18,401 (in 2008 inflation adjusted dollars), a slight increase from its 2006 level of \$17,621. The median income in the United States was \$52,029 for the same year. The per capita income in 2007 was \$9,639, a slight increase from its level in 2006 (\$9,474). In 2008, about 41.3% of all families and 58.6% of families with a female householder with no husband present had incomes below the poverty level, a slight decrease when comparing the rates of these two parameters in 2006 (42% of all families and 60% of families with a female householder and no husband present).

Education

In 1990, the Census Bureau disclosed an illiteracy rate close to 10%. Unfortunately, the Census Bureau did not collect this data in 2000 for comparison. Nevertheless, this proportion of analphabetism is unacceptable in Puerto Rico when we consider the high number of public and private schools available in the Island. According to the Department of Education and the General Council of Education, there were 1523 public and 655 private schools in 2006-2007. The total school enrollment in Puerto Rico was 1.1 million in 2007. Of this, 777,880 were students (from kindergarten to 12th grade). About 77.3% (601,429) enrolled in the public education system and 22.7% (176,451) in the private system. By 2004-2005, there were 609,742 (78%) students in the public system and 171,613 (22%) in the private system, a total of 781,355 students. As we observe, the overall number of students in the education system in PR has a decreasing trend during the last five years.

In addition to the primary and secondary education system, over 55 institutions of higher education have been established in PR since 1980. Currently (2010), there are 117 institutions of this, 47 are accredited. These include four Schools of Medicine; the University of PR School of Medicine which includes the School of Public Health and three private Schools of Medicine located in Bayamon, Caguas and Ponce. A wide range of degrees of health professions are provided by these schools.

High School Dropouts

Puerto Rico has experienced a relatively rapid shift from small-scale agricultural production to an industrial and service-oriented economy during the past 70 years. This transformation has led to a growing demand for educated workers with high school, college, and postgraduate degrees. In Puerto Rico, as in the United States, a high school diploma is a critical prerequisite for many entry-level jobs as well as for higher education. Yet, many young adults in Puerto Rico do not graduate from high school. The 2008 Puerto Rico Community Survey reported that 11.9% of 16-19 year olds were high school dropouts (not enrolled in high school and not in the labor force), a similar rate from the one reported in the 2005 survey (11%). The high school dropout rate in Puerto Rico was relatively high compared with most states, exceeded only by Arkansas (8.0%) and New Mexico (7.7%). In the United States as a whole, about 5.3% of 16-to-19-year-olds were high school dropouts in 2008.

The PRCS reported that in 2008, about 67% of people 25 years and over had at least graduated from high school and 21% had a bachelor's degree or higher. Thirty-three percent of people 25 years and over were dropouts in 2008; they were not enrolled in school and had not graduated from high school. It is estimated that nearly 35% of children who begin the first grade will desert from school before they reach the 12th grade.

The total school enrollment in Puerto Rico was 1.1 million in 2006. Nursery school and kindergarten enrollment decreased slightly in 2008 (101,000) when compared to the previous year (114,000) as well as the elementary or high school enrollment (710,000 children in 2008 vs. 735,000 children in 2006). However, college or graduate school enrollment increased from 270,000 in 2005 to 293,000 in 2008.

However, even though the dropout rate in Puerto Rico remains relatively high, there has been considerable improvement in this measure since 2000, when 14% of 16-to-19-year-olds were not enrolled in school and not high school graduates. A 15% decrease has been observed when comparing the rate in 2008 (11.9%) with the rate in 2000. It is important to highlight that in the case of females, pregnancy is the most common cause for school dropout.

The Need for Child Care

For the purposes of this report, the need for child care is measured as the percentage of children under age 6 living in families where all of the parents in the household reported being in the labor force during the week before the survey. For children living in single-parent families, this means that the occupant parent was in the labor force; for children living in married-couple families, this means that both parents were in the labor force.

According to this definition, the need for child care is lower in Puerto Rico (57.3%) than it is in the United States (64.5%). However, it is not clear from these census data whether the need for child care is low because women are not entering the labor force or whether women are not motivated to seek work because there are so few child care options available to them. Besides, some women who are "not in the labor force" may be working in the informal sector, providing domestic services or involved in other work outside of the formal labor force. Puerto Rico has a relatively large informal or underground economy, consisting mainly of self-employed workers, especially women. This informal sector includes many domestic services (cooking, cleaning, and sewing) as well as more formal services, such as catering and child care services.

In 2000, 40% of children under age 6 in Puerto Rico lived in families where all of the resident parents were in the labor force, compared with 59% in the United States as a whole, and 69% in the US Virgin Islands. In 2008, 57.3% of children under age 6 lived in families where all resident parents were in the labor force, while United States as a whole had a 64.5% rate. The relatively low percentage of children in need of child care is associated with the low percentage of women who are in the labor force. In Puerto Rico, about one-third (34%) of women ages 16 and over were in the labor force in 2000, compared with 58% in the United States as a whole. In 2008, about 53.3% of women ages 20 to 64 years old were in the labor force, as compared with 73.5%

in the United States as a whole.

In Puerto Rico, it is common for grandparents to provide child care while parents are working, and in many households, grandparents are the primary caregivers for young children. For the 2000 Census, the US Census Bureau added a new question to measure the extent to which grandparents provided care to their grandchildren. In Puerto Rico, there were 133,881 grandparents who lived with their grandchildren in 2000, and about 53% reported that they were "responsible for most of the basic needs" of one or more of their co-resident grandchildren. In the United States, only 42% of grandparents who lived with their grandchildren reported being responsible for their care. Forty-four percent of grandparents were taking care of their grandchildren for 5 years or more while in the USA the rate was 38.5%. More than half the grandparents responsible for their grandchildren and living with them (58.3%) were below the poverty level as compared to the states' rate at 18.8%. Thirty-three percent of grandparents responsible of the care of their grandkids were 60 years old or younger, while in the United States this rate was 29.1% (2000 Census).

In 2005, there were 131,355 grandparents in Puerto Rico who lived with their grandchildren; about 50% reported being "responsible for most of the basic needs" of one or more of their grandchildren. In the United States, only 43% of grandparents who lived with their grandchildren reported being responsible for their care. (Reference: US Census Bureau, 2005 American Community Survey, Selected Social Characteristics in US and Puerto Rico). In 2008, 129,657 grandparents were living with their grandchildren under 18 years old and about 60,700 (46.8%) informed they were being responsible for their care. A 1.3% fall is observed in the number of grandparents who live with their grandchildren from 2005 to 2008. A slight decrease was observed when comparing the percent of grandparents responsible for most of the basic needs of one or more of their grandchildren in 2005 with the same rate in 2008.

The PRCS for 2008 disclosed that younger grandparents were more likely to be responsible for their grandchildren. Of the total of these grandparents, 60% were in the 30 to 59 year-old range; 40% were 60 years or older. The level of poverty is greater for younger grandparents (61.8%) than for those that are older (52.6%).

Although a decrease is observed in the last years in the number of grandparents in Puerto Rico living with their grandchildren and those responsible for their care, the importance of extended family members, particularly grandparents, as caregivers in the Island is obvious.

Summary

There was an increase of 3.8% in the total population reported in 2008 as compared to 2000. In 2008, females constituted 52% of the population while 48% were males compared to 51.9% females and 48.1% males in 2000. The segment of children and adolescents between 0-19 years of age represented 28% of the total population. The MCH population, comprised by children and adolescents (0-19 years) and women 20-49 years of age, was about 49% of the total population in the Island. On the other hand, the proportion of persons over 65 years of age reached 13.6% (540,005), while it was 11.2% (425,137) in 2000. The median age was 35.9 years compared to 32.1 years in 2000. The average family size was 3.9 persons, a slight increase from 2000 (3.1 persons). The population of female householders with no husband present was 34% compared to 21.3% in 2000. Among this group, 49% (144,743) of them had children less than 18 years of age under their custody compared with 131,854 in 2000.

According to the PRCS, the per capita income increased from \$8,185 in 2000 to \$9,474 in 2006 and \$10,022 in 2008. The median household income in the past 12 months was in 2008. By 2008, PRCS reported a median household income of \$18,401 (in 2008 inflation adjusted dollars), a slight increase from its 2000 level of \$14,412.

In 2008, a total of 129,657 grandparents were living with their grandchildren under 18 years old and about 60,700 (46.8%) informed they were being responsible for their care.

Other indicators of the PR's economic profile are the unemployment rate, number of participants in the Nutritional Assistance and TANF programs, and the number of individuals holding the GIP. The 2008 PRCS reported 3,954,037 persons and 878,424 families residing in the Island.

The unemployment rate has shown an upward trend for the past decade in Puerto Rico. In February 2000, the rate reported was 10.5%. By 2008, it had risen to 15.8%. This represents a 50.5% increase. According to the PRCS, among those employed in 2008 were about 1,245,938 persons 16 years and older. The leading industries in Puerto Rico were Educational services, health care, and social assistance (23%), and Retail trade (13%).

In May 2009, the labor force in PR was estimated at 1,335,000 persons, of which 1,143,000 were employed while 191,000 were unemployed. If one compares these figures to those in May 2008 (1,219,000), there has been a decrease of 76,000 in the number of persons employed. This reduction has been accompanied by an increase of 35,000 persons that have joined the unemployment ranks. This means that the annual changes brought about a reduction of 40,000 persons in the labor force.

Unemployment is even higher among adolescents and young adults. This may generate a fertile environment for criminal activities and other social problems.

In FY 2004-2005, the average number of beneficiaries participating of the Nutritional Assistance program on any given month was 1,047,267 persons and 457,618 families, which represented 25.7% and 36.3% of all individuals and families in PR as reported by the 2000 Census Bureau. By FY 2005-2006, the average number of beneficiaries increased to 1,062,967 persons and 478,774 families. For FY 2008-2009, the total participants of the Food Stamp Program were 1,175,470 persons and 607,213 families.

For 2008, the total participants of the Food Stamp Program were 392,710.

A total of 76,146 families and 153,427 individuals were enrolled in the TANF program during 1998-1999. By 2004-2005 this numbers had declined to an average of 56,680 and 85,110 persons per month. Among all families, 15,930 of them had children under 18 years old for a total of 30,977. The number of participant families enrolled in the TANF Program increased to an average of 78,245 in 2005-2006, while a decrease of 81,857 persons per month was observed. During FY 2009, the number of participant families declined to an average of 45,665 and 70,994 persons. These figures tell us that the number of participant families in the TANF program has decreased by 40% in a 9-year's period. It is unclear if families and individuals disconnected from the TANF program are self-sufficient or simply it is the result to be in compliance with administrative procedures required by federal mandates.

These downward trends in the number of families and persons participants of the Food Stamp and TANF programs would be the results of the implementation of the PR Welfare Reform Act (PRWORA) and not necessarily it reflects an improvement of the socioeconomic status of the population.

Race and Ethnicity: The 2000 Census was the first census in Puerto Rico since 1950 to include questions about race or ethnicity. For people in Puerto Rico, as well as Hispanics/Latinos living in the United States, race is a variable concept. This is evident in a comparison of race responses between people living in Puerto Rico and Puerto Ricans living in the United States. Although the groups share the same heritage, they have very different ideas about racial identity. In the 2000 Census, nearly 81% of people in the Island identified themselves as white, while Puerto Ricans living in mainland United States reported almost equally that they were white (46%) or "some other race" (47%).

The 2000 Census revealed the following ethnic constitution in PR: 95.1% Puerto Ricans, 0.5%

Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% was Asian, Native Hawaiian and other Pacific Islander. Interestingly, according to the Census, 84% of the population residing in the Island was White, 10.9% Black and 9.6% some other race. Among the PRCS participants in 2008, 99% reported being Hispanic and only 2.8% were foreign born. The major ethnic groups living in the Island were: Puerto Ricans (95.6%), Dominicans (1.8%) and Cubans (0.5%).

As stated before, the most significant ethnic groups living in Puerto Rico are Dominicans and Cubans. Most Dominicans are concentrated in the metropolitan areas close to San Juan. A significant number of Dominicans are undocumented. In 1998, the US Immigration Agency reported 7,540 new lawful permanent resident aliens and approximately 37,700 illegal residents in the Island. Puerto Ricans, Dominicans and Cubans have a Hispanic background. Spanish is the official language of the Government of Puerto Rico, although a significant proportion of Puerto Ricans speak English moderately well.

Vital events 2008

Births: Figure III-3 depicts the demographic and vital events data registered in PR in 2008. The estimated population was 3,957,098. There were 45,664 births registered, 99.9% of which occurred in hospitals, while 31 (0.1%) were delivered at home and other places. The natality rate was 11.5/1,000 inhabitants. When compared 1990 to 2000, the crude natality rate has decreased 37.6%. On the other hand, the preliminary C/S rate reached 48.5%.

Marriages and Divorces: For 2008, the rate of marriages was 10.9/1,000 women aged 15 years and older and divorces occurred at a rate of 9.7/1,000 women aged 15 years and older.

General Mortality: A total of 28,287 deaths occurred in 2008, a rate of 7.1/1,000 inhabitants. The ten leading causes of death were: (1) Heart Diseases; (2) Cancer; (3) Diabetes; (4) Alzheimer; (5) Hypertension; (6) Pneumonia and Influenza; (7) Chronic Pulmonary Diseases; (8) Septicemia (9) All Accidents; and (10) Nephritis and Nephrosis.

Infant Mortality: Figure III-4 illustrates the descending tendency of the infant mortality rate (IMR) in PR from 1990 to 2000. During a ten-year period the IMR declined 26.1%. However, from 2000 to 2008 it has dropped 24.2%; from 9.9 to 7.5 per thousand live births.

An attachment is included in this section.

B. Agency Capacity

Since the implementation of a Health Care Reform in Puerto Rico in 1994, the health care delivery setting has continued developing. For that reason, it is important to understand the changes that have been taking place in the Health Care System (HCS) in the Island as a preamble to providing the framework of the MCH/CSHCN programs priorities and activities.

We will provide in this section a summarized explanation of the traditional PRHCS and the reasons behind its restructuring into a privatized managed care model of health services.

Originally, the HCS in PR was divided into two parallel systems, public and private sectors. The public sector addressed all health care needs for almost 60% of the population that was low-income or uninsured. Conversely, the private sector served 42% of the population who could pay out of pocket or through third party payers.

In the past, the PRDOH was the predominant provider of individual health services for low-income and uninsured populations. It operated through an extensive regionalized network of primary health care centers (level one), at least one in each municipality; areas' hospitals (level II); regional hospitals (level III); and a Supra-tertiary Center at the PR Medical Center. Nevertheless, the PRDOH had to place limitations on the range of services available and compliance with the schedule of preventive services for low-income and uninsured populations.

Insufficient allocation of funds provoked a chronic limitation of trained health care providers and ancillary services such as laboratories, X-rays and pharmacy services. There were both limited allocation of funds from the Commonwealth income and as a result of the restrictions imposed to PR by the Medicaid funds as well as to other territories. Also, patients who could pay for their services did not come to our system, except those referred by their physicians due to a catastrophic illness.

As years passed, PR's Medicaid Program paid only for hospital-based services, including in-patient and outpatient care for unqualified and medically needy persons. Consequently, Title V funds were used as the first financier for ambulatory care services for women of childbearing age (family planning, prenatal and postpartum services), preventive services for children and specialized services for CSHCN.

As mentioned earlier, the traditional HCS had primary health care facilities at each municipality who served as the gateway into the HCS for the low-income and uninsured MCH population groups. However, these primary centers lacked personnel. Also, most primary providers for women of childbearing age, infants and children were general practice physicians who lacked training to address the needs of the MCH population at risk. Besides, the number of primary providers was insufficient to serve all the population at municipal level in need of services.

High-risk pregnant women and children were referred to Regional Hospitals for follow-up. Many times patients had to travel long distances from their residency to the regional hospitals for an appointment. This represented an obstacle when seeking health care. Another upset was that patients did not receive timely follow ups according to their conditions and needs as a result of the limited number of health care professionals at regional hospitals and the high number of referrals received at these hospital settings. Patients were also referred to regional hospitals for laboratory and X-ray services. Children with special conditions endured the same difficulties as their mothers.

On the contrary, those persons with private insurance or who could pay out of pocket for health services (42%) had a private health care system with access to primary providers, specialists, laboratories, X-rays services, pharmacies and in hospital services at their community level or at the municipality nearest to their residency.

In an effort to eliminate or reduce the disparities in the accessibility and quality of health care services provided to the low-income and uninsured population (+60%), an aggressive HCR was launched in PR as mandated by Law No. 72 of September 7, 1993. The driving principles of this HCR are justice and equity for the low income population in Puerto Rico when addressing their health care needs. This initiative consists of three main components: (1) a Government Insurance Plan; (2) renting or selling its public health facilities; and (3) increasing its role in performing the core functions of public health (assessment, policy development and assurance).

The PRDOH was expected to improve its role in performing the core functions of public health following the recommendations of the State and Territorial Health Officials (ASTHO): assessment, policy development and assurance. Consequently, the PRDOH established the promotion and protection of health as its highest priority.

The GIP's three primary objectives are: (1) Universal coverage; (2) Freedom of choice; and (3) Expanded benefit package.

The privatizing component is administered by a nonprofit corporation called the Puerto Rico Health Insurance Administration (ASES, Spanish acronym), created by PR Law 72 of 1993. This corporation is responsible for a number of critical administrative activities, which include:

*Negotiating contracts: ASES is responsible for negotiating and awarding contracts to private insurers to provide services included in the ASES standard benefit package on either a fully- or

partially-capitated basis through managed care systems.

*Conducting quality assurance: ASES monitors managed care plans by requiring the monthly submission of service utilization data. Reimbursement of the health plans is conditioned to the submission of these reports. Besides, ASES is reinforcing its monitoring activities through contracts with a number of organizations; a Peer Review Organization (PRO) is assessing the quality of ambulatory care services. PRDOH monitors hospital service quality, and other groups supervise regional activities.

*Facilitating enrollment: ASES is in charge of enrolling eligible persons into the new system and coordinating eligibility determination activities with PRDOH. Medicaid certification staff of the PRDOH located at primary care centers determine which clients are eligible for the program and forward this information to ASES. In turn, ASES provides contracted insurers with the names and addresses of eligible persons so that they can send them letters informing them of their eligibility and inviting them to enroll with a managed care provider in their community. Each enrollee receives a health insurance card that provides the participant access to health care services.

In February 1994, the Commonwealth of PR began the implementation of the HCR initiative. The privatizing process of the health service delivery was completed by June 2000. Responsibility for providing personal health services to low-income and uninsured populations covered by the GIP was transferred from the PRDOH to the private sector. Currently, all care is delivered through a managed care service delivery model.

The second constituent of the privatizing process was the sale of the public health facilities. To accomplish this, the Government amended State Law 31, which expedites and facilitates the sale of government owned Diagnostic and Treatment Centers (DTCs) and hospitals. The facilities were sold to private for profit and nonprofit organizations. After the completion of the implementation of the GIP in July 2000, several laws and changes were established. These include, but are not limited to:

*Law No. 194, August 2000. This law requires the establishment of an agency to advocate for the rights of patients holding the Government Insurance Plan.

*Law No. 408 of 2000. The PRDOH reassumed the main responsibility for the provision and coordination of mental health services for the population enrolled in the GIP.

*Mental health coverage. This is included through contracted third-party services (Carved-Out) where mental health services are based on a financial arrangement capitation. The benefits included in this cover are:

- 1) Psychiatric Hospitalization
- 2) Partial Hospitalization
- 3) Services for Substance Abuse
- 4) Psychology and psychiatric consults
- 5) Others

*The Department of Health assumed the primary responsibility for immunization services after June 2002.

*Increase the length of the contract between ASES and the Health Insurance Company to at least 3 years. In 2008, the health insurance companies providing services to the population covered by the GIP were MCS, Triple-C, Humana, COSVI, First Medical, and MAPFRE, among others. Each of the eight regions is served by a health insurance company and by one of the two companies providing mental health services in Puerto Rico.

*Fourteen Clinical Guidelines were established, including Perinatal Services, EPSDT, Guidelines

for the management of pediatric patients with asthma, diabetes, and HIV screening and treatment of HIV positive pregnant women, among others. A committee was established in May 2009 to review current perinatal guidelines and expand them to become guidelines for women's health at all age stages, including preconception health.

*The PRDOH handed over the provision of direct care services to the private sector through contracts with health insurers, while maintaining the non-delegable core functions of public health. The PRDOH also retained the administration of certain federal programs and special services such as the WIC program, Medicaid, services for persons with AIDS and the MCH program, among others.

*Satisfaction with the GIP: In 2005, the past Governor created a Commission to evaluate the health system of Puerto Rico. This Commission conducted a special study about people's satisfaction with health services. One of the objectives of this study was to identify the differences between private health insurances and the GIP participants in terms of the satisfaction level with the health services. In terms of overall satisfaction with the health services, 90% of the patients with private insurance plans were satisfied compared with 77.6% of patients with GIP. This represents a significant statistical difference ($p < .05$). The analysis by type of health plan satisfaction found that patients with private plans were satisfied with: (1) the quality of treatment, (2) the attention of the medical staff, (3) the explanations of the physician, (4) the sympathy and courtesy of the doctor, (5) the sympathy and courtesy of nurses and other health care professional, and (6) the advice offered by their doctors. In contrast, patients with GIP reported they were satisfied with the friendliness and courtesy of the doctor. Finally, when they compare the satisfaction in all areas assessed, statistically they found that the proportion of patients with health services received with GIP was significantly less than the patients with private plans. The level of satisfaction is the result of several problems that MCH population with government health plan faces. The assessments of stakeholders consulted in the PRMCH needs assessment identified certain problems affecting MCH population groups that are related to patient-medical doctor relations. Other problems presented are: access limitation to health services because the primary providers restrict the number of GIP patients seen daily; number of the days in a week that the physicians work in that locality; the control of referrals to specialists by the primary provider, among others.

The third component of the HCR was the transformation of the PRDOH from a disease-oriented agency to one that encourages health promotion and protection programs and primary, secondary and tertiary prevention programs within the context of a comprehensive continuum of public health services. Health Insurance Companies follow the same pathway providing preventive and primary care services.

State Health Agency's Current Priorities or Initiatives: In addition to the GIP, which is mainly implemented by ASES, and as a result of the HCR, the PRDOH has modified its role and approaches in pursuing the optimal health of the population. The PRDOH has put emphasis on the core functions of public health that include needs assessment, policy development and assurance. Also, as mentioned before, it has reoriented its main role as a disease-focused agency to one of health promotion, disease prevention and health protection of the whole population.

Several initiatives and programs were implemented by the PRDOH to address the health needs of the whole population or to sectors of the population with special needs. These initiatives include, among others:

*The Behavioral Risk Factors Survey, a national CDC-sponsored cross-sectional study carried out yearly, designed to identify health trends, lifestyles and behaviors among Puerto Ricans: Since 2008, this survey includes questions on child, adult, and work related asthma. During 2009, it carried out the Asthma Call-Back which includes an adult and child feedback form including questions on health care utilization, asthma management, environment, medications, and cost of

asthma care, work-related asthma, co-morbid conditions, and complementary and alternative therapies. Information was included in the Asthma Surveillance System report in 2007. Besides, the BRFSS includes a Folic Acid module introduced in 2008.

*The HIV Prevention Needs Assessment, an Island wide study of a large sample of high-risk populations. The purpose of the study is to identify the health needs of these groups. The results are used to design custom-made HIV/AIDS/STD primary and secondary prevention programs.

Among the programs that contribute to address specific MCH needs are:

*Rape Victim Centers - Six Rape Victim Centers (one at Central level and 5 regional centers) offer psychological help to victims and assist them with medical, legal and social issues. They educate the public, PCPs, distribute rape kits to ERs and have a 24 hr hotline, including services to support domestic violence victims across the Island.

*Oral Health Services: Under the Health Care Reform, oral health services are included in the benefit package. Patients are not required to obtain a referral to get oral health services. They can access oral health whenever they want and with their preferred dentist.

During CY 2009, there were 1,342 dentists providing services to GIP participants. However, they are not distributed evenly throughout the Island. About 37% were located in the Greater SJ Metropolitan Area and only 14% provide services to Southwest and Southeastern Regions. We calculated that in the Southeastern Region of PR there were 124 eligible GIP children per dentist and that in the Southwest the rate was 117 children per dentist. This represents a barrier when requesting much needed services. As an example, a study conducted by the MCH Program to assess the oral health status of a representative sample of third grade students reported that 17% of them had sealants despite the fact 94% of them had dental insurance.

*The Immunization Program - The Puerto Rico Government established compliance with the Hepatitis B vaccination as a requirement for school admission, for those born from 1991 on, and those who are 13 years of age. Since 2000, all adolescents from 13 to 18 must be immunized against Hepatitis B. Puerto Rico has achieved high immunization rate in children through 2 years of age. Puerto Rico had been the nation's jurisdiction with the highest percent of immunized children for three consecutive years. However, as a result of the vaccine shortage occurred in the nation in 2002, a marked drop in the proportion of immunized children 24 months old was observed in the Island. Fortunately, results from a study carried out in 2005 to determine immunization coverage in PR revealed that this parameter had increased to 94.5%. In 2007 the result was 91.2%. Also, the vaccine schedule was modified in 2007 to recommend 3 new vaccines (rotavirus, meningococcal and HPV). In 2009, a new revision recommended catch up efforts aimed at guaranteeing 11-13 year olds receive a second Varicella dose. It also expanded the age range for MCV administration to include children between 11-18 years old, and included HPV administration for females in the 11-18 age group.

In 2010 preliminary reports of a new study to assess immunization coverage revealed 55% of 35 month olds had received a full schedule of age appropriate immunizations. This decrease in vaccine coverage is explained in part by the shortage of HIB Vaccines. Results of the 2006 CDC study became available in May 2010. It revealed 72% of 19-35 month-olds were up-to-date with their immunizations.

*Puerto Rico Medicaid and SCHIP Program: The PR Medicaid and SCHIP plans were approved in June 1998, with an allocation of 9.8 millions. In 2008-2009 a total amount of 48.1 million were assigned to help to buy a GIP for children who are eligible for the SCHIP program.

*The total population insured by the GIP was 1,446,671 in 2009. A total of 486,006 women of childbearing age (WCBA) and 425,069 children 1-19 years old are insured by this plan as compared to 453,249 WCBA and 392,517 1-19 years old children insured in CY 2008.

*As of December 2009, the network of health care providers available to serve the low income population through the GIP was the following: 339 OB/GYN's, 437 pediatricians, 171 family physicians, 189 internists, 1,078 GP's, and 1,342 dentists. Only the General Practitioners and Dentists had a slight increase (1.5% and 4.1% respectively) from 2004 (1,062 and 1,289, respectively), whereas there was a decrease of the other primary specialists needed for the MCH population.

In view of the health framework described previously in this section and the Title V requirements, the MCH role was refocused to assure that the most vulnerable population is not adversely affected by the continuously evolving system. To act according to this need, two (2) core programs are implemented across the Island. One is the Home Visiting Program that serves pregnant women and children less than 2 years of age with multiple social and health risk factors through a case management care/coordination model. The other one is the Community Outreach program, whose Community Health Workers' main responsibilities are to identify pregnant women and children disconnected from the HCS and to facilitate their enrollment into the GIP, coordinate interagency services and give follow-up to certain situations of the Home Visiting program's participants.

The delegation of the provision of direct services to the private sector has allowed the MCH/CSHCN programs to dedicate more time and resources to the development and implementation of infrastructure building activities which include creating partnerships, monitoring and evaluation, empowering communities, promoting healthy behaviors, building capacity, and advocating for supporting policies. We want to point out the following infrastructure-building activities:

- Healthy Start Consortium/MCH Advisory Board: Professionals from diverse disciplines and sectors and representatives of the MCH population comprise this group. The Advisory Board is an important piece in providing input regarding new priorities and strategies to address the needs of the MCH population. Their recommended strategies are considered and most are integrated in the action plan set to improve the health and well being of the MCH population including CSHCN.

- Breastfeeding Promotion Committee: This committee consists of a wide a number of stakeholders engaged in promoting this important behavior among childbearing women in the Island as a means to enhance the growth and development of children, while benefiting mothers and the community as a whole.

- Preconception Health Committee: Key professionals from several private and public agencies work together to devise strategies directed to increase awareness of the importance of providing an optimal preconception health for every woman of childbearing age and in turn assuring the best possible pregnancy outcomes. A pilot project to improve the interconceptional health of women with diabetes was developed to be implemented in the near future.

- Fetal Infant Mortality Review: The FIMR allows a Review Team to examine de-identified comprehensive information of infants who died in order to identify system-related risk factors that can be addressed.

- MCH Regional Boards: SSDI regional boards were strengthened with representatives of ECCS State Team to collaborate in addressing barriers and problems related to the health care system at the regional level. Their input is included in the MCH needs assessment.

- Early Childhood Comprehensive System: Establish collaboration with municipal administrations to implement Early Childhood Clearinghouses in their facilities. They also disseminate health prevention and promotion messages and information on available local services.

- Asthma Coalition: The Asthma Coalition was incorporated as an organization comprised by

public organizations, private entities, academia and parents. Its goal is to reduce morbidity and mortality rates due to asthma. It has developed the PR State Plan and the Surveillance System. The first Asthma Epidemiological Profile was updated, printed and distributed. An educational module with CME credits was prepared for distribution among health care providers in 2009 to provide training for physicians in NIH Guidelines in order to decrease asthma morbidity.

-Title V Monitoring and Evaluation Section: This MCH section monitors all national and state performance measures, evaluates outcome measures and supports the MCH needs assessment process. Several ongoing activities carried out are the implementation of the SSDI action plan; a customized PRAMS of recently delivered women conducted every other year; a Maternal Mortality Surveillance System; the Integrated Index of MCH Status by Municipality; the Health Status Book developed by SSDI Program and special applied surveys intended to increase our knowledge on selected MCH issues.

-Birth Defect Surveillance System: Currently this system monitors the prevalence of 7 categories of birth defects: central nervous system, orofacial, musculoskeletal, genitourinary, chromosome, cardiovascular and others. These categories represent a total of 44 birth defects, among them: NTD's, cleft lip/palate, gastroschisis, limb defects, omphalocele, talipes equinovarus, ambiguous genitalia, Trisomy 13, 18 and 21, albinism, congenital heart defects, and others.

-Universal Newborn Hearing Screening Program (UNHSP): Its goal is to implement newborn hearing screening at all birthing institutions. The program has among its strategies an Advisory Community to help in the implementation process. Legislation has been passed to support the UNHS in PR. The percent of newborns screened for hearing loss increased to 98% in 2008. The program obtained a supplemental grant to improve its performance on objectives related to improving the percentage of babies referred for audiological evaluation that received the evaluation before age of 3 months and to improve the percentage of babies diagnosed with hearing loss that are referred to early intervention programs and receive amplification before age of 6 months. Progress related to these objectives has been affected due to limitations imposed by local Law #7 (2009) resulting in delays for contracting the service coordinator and the family advocate to follow up families of identified newborns.

-Universal Newborn Metabolic Screening Program: This comprehensive program began in 1983. It screens, provides confirmatory testing, genetic counseling and treatment for infants with a confirmed diagnosis.

-Emergency Medical Services System for Children, Program for the prevention of pediatric emergencies: This program was developed and implemented in the University Pediatric Hospital with the support of the MCH program. A Law was approved aimed at the sustainability of the program through the recurrent allocation of \$90,000 from state funds.

-Maternal Mortality Review Committee: A multidisciplinary committee was established in 2005 to evaluate pregnancy-related deaths identified by the maternal mortality surveillance system. The Committee meets to review summaries of information gathered from cases with undetermined cause of death to classify or discard them as maternal deaths. Their evaluations serve to make recommendations to improve the health care delivery system.

-Healthy Start Community Based Consumer Groups: Informal community based groups of participants in the Home Visiting Program who meet to identify barriers to health care and health related problems and work toward eliminating them.

The Perinatal Guidelines Review Committee: This multidisciplinary committee's goal is to adapt the perinatal guidelines to PR situation; with these adapted guidelines the evaluation subgroup will classify hospitals that provide perinatal services. Members of the Committee made recommendations following the results of a study performed in 2008 to classify hospitals according to the perinatal services they provide. Adjustments to the analysis followed and its

conclusion is underway.

-**"Alianza de Niños y Jóvenes Saludables, Activos y Bien Nutridos"**: This alliance is designed to provide the organizational structure needed to coordinate and integrate the efforts of the government agencies, representatives of the academia and other private entities in their task of reducing obesity prevalence among children living in Puerto Rico. It consists of three workgroups: Investigation, Education and Public Policy.

-**Association of Primary Health Care of Puerto Rico (APHCPR)**: This is a non-profit organization that represent corporations, organizations and professionals who provide or have interest in the provision of preventive and primary health services in Puerto Rico that respond to the needs of the communities they serve. Founded in 1984, this entity supports mainly primary health centers in Puerto Rico that receive federal funds from the section of Health Primary USA (BPHC). They serve, currently, more than 350,000 patients in 37 municipalities on the Island, approximately 10% of the total population of Puerto Rico.

Children with Special Health Care Needs

The CSHCN program provides specialist, sub-specialist and health related services to eligible children with special health care needs through the seven regional Pediatrics Centers (PCs). Due to reductions in federal and state budget allocations, orthoses and earphones are not currently provided in PCs, and metabolic products are provided in a limited manner. The UPR School of Dentistry maintains a contract with the PRDOH for the provision of orthodontic services to children with cleft lip/palate and other craniofacial anomalies. There were 1,440 visits to this clinic during year 2009. The PRDOH also maintains a contract with the UPR School of Medicine for the provision of neurosurgical and orthopedic surgeries.

Sixteen (16) years after the implementation of the Health Care Reform (HCR) in PR, CSHCN of families with the GIP still struggle to obtain referrals for specialized services for their children from their primary physician. Data obtained from the PR Survey of CSHCN (2009) revealed that 66% of CSHCN needed specialist services during the last year and 13% did not receive them; the most frequent reasons for not receiving the service was that the health plan did not cover the service and the primary physician did not provide the referral. The number of children served by Pediatric Centers (PCs) decreased from 8,155 during FY 2007-2008 to 6,444 during FY 2008-2009, representing a decrease of 21%. Reasons for this decrease include: delayed payments to medical specialists by the PR Department of Treasury due to the governmental fiscal crisis and lack of state monies, resulting in the resignation of specialists in various PCs. This situation was referred to the Secretary of Health, Dr. Lorenzo Gonzalez and meetings are underway with ASES and the UPR School of Medicine in order to identify funding sources to continue the appropriate and timely provision of services to CSHCN and their families.

CSHCN Survey: The CSHCN Section developed the first Puerto Rico Survey of Children with Special Health Care Needs (ENNES-PR, Spanish acronym) implemented in 2009. This is an island wide representative cross-sectional household telephone study established with the goals to assess the prevalence of CSHCN less than 18 years old and to explore the extent to which this population have medical homes, adequate health insurance, and access to needed services. Other topics include functional difficulties, care coordination, families' satisfaction with care, and transition services. Interviews were conducted with 850 parents or guardians who know about the child's health. Data collection for the survey was completed on June 2009. The study is currently in the analysis phase by the CSHCN Section's Epidemiologist. Preliminary results were presented to the CSHCN Committee. A dissemination plan will be developed to share this information in different forums at the state and federal levels.

-**Autism**: The PR Survey of CSHCN reported that approximately 5.9% of CSHCN less than 18 years of age have autism or autism spectrum disorders according to parents' responses. This represents an estimated autism prevalence of 0.98% in the children's general population less

than 18 years in PR, similar to CDC reported prevalence of one out of one hundred (1/100). The law project for the autism public policy completed in December 2008 was amended and finally vetoed by the Governor during year 2009. In April 2010, the Secretary of Health submitted his recommendations to the Legislature. The main limitation of this project is the non-assignment of state funds to comply with the imposed responsibilities to agencies and municipalities, but mainly to the PRDOH. The Governor of PR recommended implementing a study to determine the prevalence of autism in the general population before his approval of the law. This study is in charge of the School of Public Health of the UPR Medical Sciences Campus.

As a final commentary, we want to emphasize that Puerto Rico has a health care system that includes the three health decision-making components, which are:

- Informal segment located at community level, with the participation of individuals, families and concerned groups organized to promote specific health issues.
- Formal health care system comprised of network of health providers, organizations, public and private health institutions, and different levels of care that provide preventive and therapeutic services.
- Intersectorial area consisting of other public, private and non-governmental entities that indirectly influence health.

Despite all of the above, this health care system has had major challenges in accomplishing its goal of improving the opportunities for optimal health of all the population groups. Reasons for this are its fragmentation and the lack of a well designed Health Management Information System (HMIS) so essential for the proper communication among all the parts included in the HCS. Not having this system makes it difficult for managers to administer their programs based on reliable and timely data that may be converted into useful information for choosing the most appropriate interventions.

A transformation is currently in progress within the Health Care Reform in Puerto Rico. Health care access is one of the current Governor's main priorities. As publicly announced by him in April 2010 during his message on current government financial matters, beginning in September 2010, ASES will be required to have an updated infrastructure to comply with the new GIP integrated health model. This new model is called "Mi Salud" (stands for Integrated Model of Health, in Spanish). The new model of health places a greater responsibility on insurers and seeks to improve access to medical services and extend it to more people. The GIP will include access to specialists without referrals inside the preferred network; will eliminate the primary provider prescription authorization; will integrate mental and physical health in one place; will offer extended time in the medical groups (IPAs); and will require quality measures for the services offered by insurance companies. Also, all medical groups are expected to offer primary services at least until nighttime. Another issue under the Governor's consideration is to modify the levels of income eligibility for middle class people to benefit of the Government health plan.

C. Organizational Structure

The Puerto Rico Department of Health (PRDOH) is the umbrella agency assigned in Article IV, Section 6 of the Constitution of the Government of PR responsible for all matters related to public health, with the exception of maritime quarantine. The Secretary of Health is appointed by the Governor of Puerto Rico and confirmed by the Legislature.

The goals of the PRDOH are to:

- * Increase years of productive healthy life of all residents in PR;
- * Reduce health disparities among residents in the Island; and
- * Achieve access to preventive health services for all.

The PRDOH establishes the vision, mission, goals, organizational structure, and core functions of its components under the umbrella of the agency through the Administrative Order #207, signed on March 20, 2006 by the Secretary of Health (Appendix 1, which substituted Administrative Order #179 of January 15, 2003). In 2008, the PR Office of Management and Budget endorsed and made official the organizational structure established by Administrative Order #207.

This reorganization took into consideration similarities between programs, program size, efficiency, centralized vs. decentralized services, interdependency of functions, and the current government fiscal and administrative reform. The reorganization is expected to facilitate collaborative efforts and integration of projects. This new organizational structure has three main structural levels:

Advisory entities responding directly to the Secretary of Health:

- Health Council
- Regional Health Directors
- Internal Audit Office
- Legal Counsel Office
- Communication and Public Affairs Office
- Commissions for Suicide Prevention, Nutrition and Radiation Control
- Pan American Health Organization Office

Other entities responding directly to the Secretary of Health:

- Direct Service Health Care Facilities (ASSMCA, ASEM, Cardiovascular)
- Emergency Response Corps
- Research and Epidemiology Office
- Medicaid Office
- Health Insurance Administration (ASES)
- Public Policy Office
- Center for Bio-Security Preparedness and Emergency Response
- Office for the Regulation and Certification of Medical Services Providers
- WIC

Support Services Units: Provide administrative support:

- Auxiliary Secretariat for Health System Planning and Development
- Human Resources and Labor Relations Office
- Technology and Information System Office
- External Resources Office
- Auxiliary Secretariat for Administrative Affairs
- Fiscal Affairs Office

Operational Units: They provide health prevention, promotion and protection services at the central, regional and municipal level:

- Auxiliary Secretariat for Prevention and Disease Control: changed to become the Auxiliary Secretariat of Family Health, Integrated Services and Health Promotion (ASFHISHP)
- Auxiliary Secretariat for Health Promotion: eliminated and integrated into the ASFHISHP
- Auxiliary Secretariat for Medical and Nursing Affairs
- Auxiliary Secretariat for Health Care Facilities Regulation and Accreditation
- Auxiliary Secretariat for Environmental Health and Public Health Laboratories

The highlights of the Administrative Order can be summarized as follows:

- Creation of an Auxiliary Secretariat for Medical and Nursing Affairs whose main responsibility is dealing with direct patient care (hospitals and clinics).

- Creation of the Research and Epidemiology Office and the Center for Bio-Security Preparedness and a Public Policy Office. Both respond directly to the Secretary of Health.

-The Auxiliary Secretariat for Prevention and Disease Control: changed its name to Auxiliary Secretariat of Family Health, Integrated Services and Health Promotion (ASFHISHP) in 2009. To deal with the loss of human resources due to Law 7 of March 2009, and the need to continue providing essential services, fusion of secretariats took place internally. The Auxiliary Secretariat for Health Promotion was eliminated and its staff and programs have been included under the ASFHISHP umbrella.

The ASFHISHP is responsible for the development and implementation of strategies and activities geared toward the identification of risk factors contributing to poor health among all individuals. It is also in charge of the development and implementation of programs intended for the reduction or elimination of such risk factors and the prevention of diseases. Its approach is based on primary interventions at the community level and with special populations. The ASFHISHP is comprised of a number of divisions and programs which address a wide scope of health needs of different population groups, among them the MCH population. The Habilitation Services Division, now known as the Children with Special Health Care Needs Section, was inserted as part of the Maternal, Child and Adolescent Health Division; both programs are included in this Secretariat, along with the Immunization Program, Center for Victims of Sexual Assault, Central Office for HIV and Sexually Transmitted Disease Affairs, and Mental Retardation Services Division (Appendix 2).

Before the implementation of the Health Care Reform (HCR) in 1993, PR's MCH program played many different roles in serving mothers and children, including providing direct services, administrating population-based programs and assuming responsibility for core public health functions.

As a result of the HCR implementation and following recommendations by a Region II TA in 1995 (Health Systems Research, Inc.), the MCH services were refocused. Title V resources were aimed at filling the gaps in direct services not covered by the GIP; developing and implementing support programs for at-risk mothers and children; developing population based programs; infrastructure building services, such as carrying out activities to improve the integration of the public and private systems of health care, needs assessment, applied research, development of surveillance systems, inter-agency coordination of related services, professional development, public education, etc.

Being these divisions and programs under the same leadership facilitates the collaboration, cooperation and coordination of services among the central, regional and local staff.

As stated previously, under this new organizational structure the Habilitation Services Division became part of the Maternal, Child and Adolescent Health Division and is currently known as the CSHCN Section (Appendix 3). Both divisions make up the PR Title V Program. The Maternal, Child and Adolescent Health Division is currently divided into three sections:

-Perinatal, Child and Adolescent Services Section

Included in this section are: Healthy Start Project, Comprehensive Adolescent Health Services Program, Birth Defects Surveillance System and the Folic Acid Campaign, Systems Development and Inter-agency Collaboration Projects: the Early Childhood Comprehensive System Project, the Asthma Prevention Program and the Asthma Surveillance System.

-Children with Special Health Care Needs Services Section

It includes services provided by the Children with Special Health Care Needs Program, the Early Intervention System of Services and the Universal Newborn Hearing Screening Program.

-Evaluation, Monitoring, Research and Systems Development Section

The State Systems Development Initiative is an essential part of this section.

The MCH Division and the CSHCN Section leaders work in collaboration to promote the development of systems of care for all women and children as well as the provision of direct supportive population-based and infrastructure building services. The main goal is to reduce maternal, infant and pediatric mortality in PR. Title V funds and other federal initiatives sustain the programs, projects and activities.

Since March 2008 the PRDOH External Resources Officer handles exclusively the administrative and fiscal matters related to federally funded projects. This Officer is responsible for managing issues regarding the NGAs and FSRs of all the projects and programs sponsored with federal funds. He also helps programs comply with all the rules, regulations and reports required by the federal government within the specified timeline.

A new classification and retribution plan was initiated by the agency in July 2007 to adjust the personnel classification and retribution scale to the role the PRDOH has assumed after the HCR began. With this plan the PRDOH was expected to competitively hire and retain professionals in fields critically important to our infrastructure building activities for example, epidemiology, biostatistics, data entry, informatics and evaluation. The plan also improved the salary scales. However, Law No. 7 of March 3, 2009 was implemented as a result of the financial crisis taking place in the Island. This Law established a layoff plan in governmental agencies as well as the temporary suspension of some dispositions contained in laws, labor agreements, and compromises regarding salary raises and benefits, among others. As a result, nearly 17,000 employees have been laid off from public agencies and all issues related to salary rises, hiring of staff, and other fiscal matters are suspended at least until March 3, 2011. Unfortunately, the CSHCN Section Director received layoff notice due May 28th, 2010. An Acting Coordinator is in place to provide continuation of works within the Section.

Organizational changes are in progress within the PRDOH to compensate for the loss of work force and the need to continue providing the essential services to the population. Meetings have taken place between programs and a team in charge of the restructuring of the PRDOH to help them in their reform process. As needed, changes will happen within the MCH Program's organizational structure to make it more responsive to the needs of the population we serve.

An attachment is included in this section.

D. Other MCH Capacity

MCH PROGRAM

Direct Services:

We attempt to provide services needed by WCBA not covered by the GIP package, such as contraceptive methods and Rhogam immunization for Rh negative non-sensitized pregnant women in their 3rd trimester. However, budget reductions, rising family planning (FP) costs, legislated salary increase for nurses, among other issues reduced our ability to offer specialty services. As an alternative, we refer women to 330s services, Title X clinics or PROFAMILIA (a non-profit organization) when we lack the methods requested.

Enabling Services:

-Home Visiting (HV)/Healthy Start Program: A family-centered, community-based service provided by specially trained PH nurses to pregnant/pp women and children up to 2 years of age with medical/social risk factors. The HVNs conduct a complete medical, psychosocial and environmental assessment; develop a care plan in accord with the family; coordinate services through referrals to the entities in the community; offer health education on a variety of topics; carry out formal risk assessment for smoking, alcohol, drug use and maternal depression; give breastfeeding counseling and promote an interconception period f/up of at least 24 months, among others. By June 2010, there were 76 HVNs in 65 of the 78 municipalities.

-Perinatal Component: Eight perinatal nurses, located at selected hospitals, offer individual/group

education on a range of topics; make referrals to HVNs and other services; collect perinatal data; and participate in surveys designed at the central level. They are trained in breastfeeding techniques, FP, contraceptive methods and risk assessment of mothers and infants.

-Community Outreach: By June 2010 there were 44 CHWs in 43 municipalities. They identify pregnant women and children cut off from the HCS, facilitate their enrollment into the GIP, coordinate interagency services, conduct prenatal courses, provide orientation on MCH topics at community level, distribute educational materials, participate in health fairs and data collection, and identify problems of access to health services.

The MCH Program has lost staff that provided enabling services. Several HVNs have retired. Law 7, 2009 enacted by the local government to cope with the Island's budget deficit caused a massive layoff of public employees and new hiring regulations, making it difficult to replace HVNs and other key personnel. Several CHWs have been laid off following this law. Due to staff loss and to continue providing the same level of MCH services, reorganization is in progress within the program. HVNs will be reassigned to cover other municipalities as needed. Perinatal nurses will reassume HVN functions to help cover municipalities that lack HVP assistance. The tasks carried out by perinatal nurses will be shared by other HVNs as needed.

Population-Based Services:

The MCH program continually aims at developing new population-based programs and increasing its involvement with those already available, among them a newborn metabolic/genetic screening program, immunization program, PNC outreach, toll-free information line, public education on MCH topics, distribution of educational materials, prenatal HIV counseling and testing, and voluntary treatment of HIV positive pregnant patients with antiretroviral drugs.

The Comprehensive Adolescent Health component integrates all activities intended to reduce adolescent risk factors: pregnancy, unintentional injuries, violence, alcohol and drug use, etc. It trains middle school students as peer health promoters (PHP) and organizes activities to assist them. It continues developing a culturally appropriate curriculum on Positive Youth Development and a train-the-trainers guide to promote its application in agencies that serve adolescents. So far, there are PHP in 38 schools across the Island. We also applied for new federal funding aimed at adolescent pregnancy prevention to deal with this issue.

At central level the adolescent area consists of a physician with administrative functions (under contract), a program coordinator (a nurse with a Bachelor in Nursing Sciences), and a social worker. It also has 8 regional coordinators (social workers) supervised by the Regional MCH Directors.

To enhance our scope of services and respond better to the needs of the MCH population, the adolescent coordinators will become MCAH social workers as they were originally recruited for. At Central level the Associate Director position will become an Adolescent Health Consultant. A Health Educator will be integrated to the team.

Infrastructure Building Services:

Currently, the MCH program has among its staff a group of programmatic advisors on reproductive health, pediatrics, social work, health education and cultural anthropology.

The Title V Monitoring and Evaluation Section is at this level of service. It receives support from the SSDI project and consists of a Demographer (the SSDI and Section Coordinator), a Biostatistician in charge of the PRAMS-like surveillance, two epidemiologists (master level), one in charge of investigations on reproductive issues and the other on children's health; a Cultural Anthropologist in charge of qualitative researches and an Evaluator responsible for developing a maternal deaths surveillance system, among other tasks. All this personnel are under contract.

-MCH Advisory Body (Healthy Start (HS) Consortium): About 50 representatives from public

agencies, academia, community organizations, and consumers form this group. They provide input on the selection of MCH priority needs and how to address them, help coordinating services across public and non-governmental agencies and are resources for professional development.

-MCH Regional Boards: Representatives from public and private agencies and consumers are included. They facilitate services coordination across agencies and programs and provide recommendations to deal with system problems that interfere with access to services. The ECCS Project is a member.

-Maternal Mortality Review Committee: Members include a social worker, midwife, health educator, obstetrician, nurse, pediatrician and evaluator (the Committee Coordinator), among others. Regional MCH Directors and selected nurses collect information at regional level. The MCH Director (Obstetrics Consultant) visits hospitals to review the records of those cases with undetermined cause of death. The Committee meets to review summaries of information gathered from those cases to classify or discard them as maternal deaths. Their evaluations serve to make recommendations to improve the health care delivery system.

-Fetal Infant Mortality Review (FIMR) project: The Committee includes a wide array of concerned health stakeholders, including MCH and HS staff. It is one of HS Project's tasks. Several nurses at regional level collect the data for the review. The MCH Program Coordinator (a pediatrician), and the HS social worker prepare together the case summaries that are then reviewed by the Committee. A summary with recommendations was prepared recently on the findings of several reviewed cases.

-Preconception Health Promotion Committee: Its members include representatives from MCS HIC, WIC, MCH, and other PRDOH program staff, among others. One of its first tasks was to prepare a 4-module instrument to be used in a project aimed particularly at interconceptional women with diabetes. The instrument is finished and ready for implementation.

ECCSP has a strategic plan aimed at pursuing the development of cross-service systems to support children 0-5 years to be healthy and ready to learn. A State Interagency Planning Committee supports the project.

-Addressing Asthma from a Public Health Perspective: The PR Asthma Project (PRAP) aims at preventing deaths due to asthma in PR through an array of interventions to be implemented based on asthma surveillance data and partners recommendations. The CDC supports this project.

-The BDSS, supported by CDC, currently tracks 44 birth defects. It is included in the Perinatal and Pediatrics Section of the MCH Division.

The MCH/CSHCN programs carry out other activities, such as the development of SOC, interagency coordination, TA and support of community programs, professional growth in the area of MCH, information dissemination to key stakeholders, policy development and assurance of care.

The MCH Director, and Obstetrician, was designated in May 2009. She has worked in the PRDOH since 1981 in various positions, as a primary health care provider in high risk prenatal care clinics, as Medical Director of one of these clinics, and as the MCH OB-GYN Consultant for 12 years (See Appendix 4).

The MCH Program has 34 full time positions at Central level and 8 regional teams, each under a Regional MCH Director. In 2008, two regions were fused (Mayaguez-Aguadilla) under one Director. Currently, regional teams consist of a Director, a WCBA services coordinator, a pediatric services coordinator, an adolescent health coordinator, a health educator, a perinatal nurse, and administrative support staff. Reorganization is in progress to continue providing much needed

services particularly in areas severely impacted by staff loss. Major changes taken into consideration at regional level are: a coordinator to cover WCBA and pediatric services, a MCAH social worker, and the reincorporation of the perinatal nurse as a HVN while all HVNs will share duties carried put previously by the perinatal nurse as needed.

CSHCN PROGRAM

Direct services:

The CSHCN Program provides and coordinates direct services through seven Regional Pediatric Centers (RPC). As of June 2010, the number of employees at the RPC was 142. Of these positions, 103 are funded by Title V and 39 by state funds. These include direct service and administrative support positions. Contractual staff paid by Title V include: one plastic surgeon, one ophthalmologist, three orthopedic surgeons, seven audiologists, one pediatrician, two psychologists, three speech and language pathologists, one occupational therapist, two physical therapists, two social workers, two nutritionists, one medical director and one data entry,

Enabling Services:

The CSHCN Program has a parent-staff since June 2009 (part time contract of 60 hours/month) helping develop links with families, participating in decision making and planning, and developing activities for families with CSHCN.

Population-based services:

Two Title V funded audiologist positions and seven audiologists under contract provide support to the Universal Newborn Hearing Screening Program.

Infrastructure Building Services:

The CSHCN Program Central Office has 8 positions that include the CSHCN director/coordinator position and 7 administrative support positions. There are 3 contractual staff positions: an Epidemiologist, a Health Systems Evaluative Investigation Specialist and Information Systems Specialist. The Epidemiologist is in charge of designing and conducting CSHCN research studies and needs assessments. The Evaluative Investigation Specialist is in charge of developing evaluation instruments, collecting and analyzing qualitative data and coordinates with the CSHCN Committee for strategic planning. The Information System Specialist is in charge of providing support at the central and regional levels and updating Information Systems.

An attachment is included in this section.

E. State Agency Coordination

The needs of the MCH population are numerous and multifaceted. Due to this, there is no public or private agency, program, or community based organization that can fulfill all the needs of the most vulnerable population consisting of WCBA, children and adolescents. Therefore, it is essential to establish appropriate coordination mechanisms among all concerned entities in order to reduce duplication and division of services and to be more efficient in the utilization of the limited resources available.

In PR, we have fairly satisfactory coordination mechanisms established among several public agencies and other sectors of the community at the state, regional and local levels. These coordination mechanisms are found at both formal and informal levels. The PRDOH has set up formal relationships with other state public agencies, local public health agencies, academic institutions, federally qualified health centers and tertiary health care facilities. All of these formal agreements improve the capacity of the MCH/CSHCN programs.

This formal coordination is the result of established laws and executive orders by the Governor, which mandates specific agencies and programs to coordinate collaboratively certain types of services for the MCH population. Memorandums of Understanding (MOU) are set up among agencies and programs, which enhance the coordination of services. Other formal mechanisms

contributing to achieve this goal include interagency committees, task forces and coalitions. The participation of consumers is also required in several of the laws, executive and administrative orders and committees.

Following are some of the laws, executive orders, MOUs and committees that improve the provision of health services and coordination among all concerned entities, which serve the MCH population. The staffs of the MCH/CSHCN programs at central level are regular members of most of these agreements.

General:

*Law No. 72, Sep 7, 1993: Ordered the establishment of a Health Care Reform which includes a GIP for all individuals under 200% of poverty level. ASES, created under this law, is responsible for negotiating and awarding contracts to private insurers to provide services included in ASES standard benefit packages. ASES is required an updated infrastructure to comply with the GIP's new integrated health model starting Sept 2010. This model includes, among other things, access to specialists without referrals inside the preferred network, the elimination of primary provider prescription authorization; integration of mental and physical health in one place; and quality measures for the services offered by insurance companies.

*Law No. 194, Aug 2000: To establish the Patient's Rights and Responsibilities.

*Law No. 408, Oct 2000: To establish the needs for prevention, treatment and rehabilitation in mental health, and to create the Bill of Rights of adults and minor patients.

Women of Reproductive Age and Infants:

*Law No. 84, 1987: This law mandates the PRDOH to create the Hereditary Diseases Program to detect, diagnose and treat children with Hereditary Diseases. It requires that every infant born alive in PR must be screened for PKU, hypothyroidism and sickle cell anemia. Currently, two other conditions are routinely screened: galactosemia and congenital adrenal hyperplasia. In addition, the Law requires the establishment of the Council for Hereditary Diseases of PR. The council is integrated by four (4) licensed physicians; one (1) representing the Secretary of Health; one (1) parent of an affected child; and one (1) member should represent programs of continued education for health professionals. Among its responsibilities, the council will recommend the type of conditions to be screened and the kind of diagnostic tests to be used by the PR Hereditary Diseases Program. This law is under revision by legislators in order to increase the number of conditions to be screened.

*Law No. 27, Jul 1992: Allows health care professionals to provide prenatal care and postpartum services to youngsters without parental or guardian consent.

*Law No. 70, Aug 1997: Orders the Secretary of Health to establish a committee responsible of developing studies and providing recommendations for the reduction of infant mortality. An interagency committee, comprised of nine members, public and private stakeholders including ASES, under the leadership of the MCH Director, was established to comply with the law. A Plan of Action was developed to integrate recommendations from the March of Dimes Preterm Task Force. The MCH Division is actively participating in this task force. A FIMR Committee is in place to review IM cases and to give more insight into this problem to reduce its occurrence.

*Prematurity Taskforce: Sponsored by MOD. Members include representatives from AAP, ASES, Academia, Hospital Administrators, House of Representatives, MCH, NGOs and parents of preterm infants, among others. Their attention focus towards educating the public, providers and investigating risk factors associated with the high preterm rate in PR.

*Law No. 32, Jan 10, 1999: To establish areas designed for breastfeeding and diaper change for young children in malls, government centers, ports and airports.

*Law No. 239, Nov 2006: This law amends Law No. 427 of 2000 to increase to one hour (originally 30 minutes) the time working moms have for breastfeeding or milk extraction at their work settings.

*Law No. 311, Dec 19, 2003: A legislative mandate to require coverage for newborn hearing screening and audiological diagnostic testing for all health insurance plans in PR.

*Law No. 79, Mar 13, 2004: Prohibits the administration of any breast milk substitute to newborns without the written consent of the mother or a pediatrician's recommendation. Any institution that violates this law will be fined.

*Law No. 95, Apr 23, 2004: Forbids discrimination against women who breastfeed in any public setting.

*Law No. 156, Aug 2006: This law protects women's rights during delivery, birth and postpartum period, among others, having a companion during the delivery process if she wishes to, being informed of the surgical procedures that may be available or necessary, benefits of breastfeeding, and vaginal delivery as her first choice if no complications arise.

*Law No. 79, Jun 2008: To require all businesses selling alcoholic beverages to have a poster with an advice aimed at women of reproductive age to raise their awareness on the risks of having a baby with birth defects if they consume alcohol while pregnant.

*Executive Order 2008-40, Aug 2008: Convened a commission to address the increasing tendency of C/S deliveries in PR. Following this, an Administrative Order was issued by the Secretary of Health in Dec 2008 to develop a public policy aimed at reducing unnecessary C/S procedures while promoting vaginal deliveries in the Island. The MCH Division collaborated in the elaboration of the public policy document. A Senate legislative piece is in progress to address some of the issues related to this Order.

*Healthy Start Consortium and Advisory Board to the MCH programs. Currently, it consists of about 40 members who represent public agencies including the PRDOH, academia, community based organizations, Medicaid, ASES, WIC, consumers, etc.

*Preconception Health Promotion Committee: Has representatives from ACOG, the MCS Health Insurance Company, HS, WIC, Birth Defect Registry staff, midwives and MCH Division staff. It aims at increasing awareness of the importance of a woman maintaining an optimal health in the preconception period to obtain better pregnancy outcomes. Among other strategies, the Committee developed a pilot project intended to improve the interconceptional health of women with diagnosed diabetes. The collaboration of WIC and MCS is pivotal in carrying out the project. Participants will receive four educational interventions on selected topics provided by staff from WIC, MCS, and MCH Division.

*A Collaborative Agreement between MCH and the PRDOF allowed us to provide them with the TA they needed to replicate our HVP model in two regions. MCH and HS staff trained them on our home visiting procedures, risk assessment tools and shared with them our HVP manual and data entry forms. They provide services to women in municipalities where we currently lack a HVN, primarily new cases with strong suspicion of family violence, sexual abuse or already under child protective services.

*A collaborative agreement between the MCH Division and ASSMCA allows active participation in each other's Advisory Committees and sharing of data, trainings and educational materials.

*Committee for the Development of the Preventive Health Guidelines for Women of Reproductive Age: ACOG, the PR College of Physicians, ASES, HS and MCH Staff, among others, are

included. It intends to review the current PRDOH prenatal guidelines to update and expand them to cover all aspects regarding preventive health measures and services for WCBA. The Committee held its first meeting in May 2009.

*Perinatal Care Guidelines Review Committee (PCGRC): Established to develop uniform guidelines to identify the capacity of perinatal care services of Hospitals Island wide. The Committee is comprised of obstetricians, pediatricians, neonatologists, perinatal nurses, emergency transportation services, epidemiologists, among others.

Children and Adolescents:

*Law No. 25, Sep 1983: Requires complete immunization as established by the PRDOH to all preschool, school age children and students at university level at the time of enrollment.

*Law No. 259, Aug 31, 2000: To establish an Emergency Medical Service System for Children Program for the prevention and surveillance of pediatric emergencies. The law assigns \$100,000.00 per year for the implementation of the program. This legislation allows the sustainability of the EMSC program granted by the federal government. The EMSC Advisory Committee is composed of 9 members from public agencies, hospitals, 911 services, health professionals and community members.

*Law No. 296, Sep 1st, 2000: Mandates an annual medical evaluation according to EPSDT standards for all children enrolled at day care centers, Head Start programs, and private and public schools.

*Law No. 177, Aug 1st, 2003: For the wide-ranging protection and well being of childhood. It requires coordination (Art. 6) between the DOF, DOE, DOH, AMSSCA, Housing Department, Justice Department & Police Department, among others.

*The PR Asthma Coalition: Implemented in 2000 to reduce morbidity-mortality due to asthma in PR. The representative from the SSS Health Insurance Company is the president.

*Law No. 56, Feb 1, 2006: In 2005, PRDOH and the Asthma Coalition urged the creation of the "Law for the Treatment of Students with Asthma While in School". As a result Law 56 was enacted in 2006, which recognizes the right of students with asthma or other related conditions to self-administer medications in school with the consent of their parents or guardians.

*Law No. 107, August 10, 2007: requires a special license for motorcycle drivers. It requires taking a written exam, receiving a special training provided by a licensed instructor, becoming certified and then taking a road test. To drive a motorcycle a person must be 18 years of age or older, wear a safety approved helmet and follow a dress code. Carrying passengers younger than 12 years of age is prohibited.

*Law No. 220, Aug 21, 2004: To establish the Bill of Rights for pregnant teens enrolled at public schools.

*Law No. 66, Mar 2, 2006: Amended Law No. 40, the Law to Regulate Smoking in Public and Private Places. This law aims to protect the non-smoking public from the harmful effects of environmental tobacco exposure, and to increase awareness of the health consequences of smoking. It bans smoking in all public spaces, including workplaces, businesses, schools and universities, day care centers, private vehicles when a child under age 13 is a passenger, restaurants, cafeterias, bars, pubs, convention centers, parks, and almost all private and public spaces. Exceptions are made for businesses that are dedicated exclusively to the sale of tobacco products, private homes, and hotel rooms designated for smoking.

*Law No. 2, Feb 29, 2008: Requires all health insurance companies to cover smoking cessation methods and products for participants of the plan. It took effect in July 2008.

*The PR Penal Code was amended in 2007. Some of the indicators related with adolescents will be impacted by this reform. The age for an adolescent female to consent to have sexual relations has been increased from 14 years to 16 years. This change limits the services that can be provided to a sector of the adolescent population.

*Interagency agreements with the DOF and the Early Head Start Consortium are being revised and updated.

*The UNHS and ECCS have their respective inter-agency steering committees.

*An MOU, signed in Apr 2008 by ASSMCA and the MCH Division, is still valid to share direct database from the Monitoring the Future survey ("Consulta Juvenil", Spanish name) which measures risk behaviors in adolescents attending schools. This data will allow the MCH SSDI project to carry out additional in-depth analysis of high risk behaviors among adolescents such as tobacco, alcohol and drug use, and premature sexual activity, among others.

*The Juvenile Correction Administration continues collaborating with the MCH Adolescent Health Program in the implementation of the youth promoters program in two of their juvenile detention centers.

*Title X clinics, federally qualified health centers and PROFAMILIA, an NGO that specializes in reproductive health issues, continue providing family planning services to some of the GIP participants we have not been able to serve due to our limited fiscal resources.

*"Alianza Niños y Jóvenes Activos, Saludables y Bien Nutridos" (Alliance for Healthy and Well Nourished Children and Adolescents): Was established in Dec 2007 to educate the public on issues of nutrition and physical activity in children and youths, promote the establishment of a public policy that would support local efforts to reduce the obesity epidemic, establish a surveillance system and conduct research to identify risk factors associated with the condition. Members include representatives from the Departments of Agriculture, Labor, Housing, Education, Health, Sports and Recreation, AAP, Insurance Commissioner, Commission on Nutrition, WIC, College of Nutritionist, and UPR School of Public Health, among others.

Children with Special Health Care Needs:

*Law No. 84, July 2, 1987: Created the Hereditary Diseases Program to provide screening, diagnostic and treatment services for hereditary diseases that affect relatively large segments of the population. The services include the Newborn Screening Program for congenital hypothyroidism, phenylketonuria, galactosemia, hemoglobinopathies and classical congenital adrenal hyperplasia. The Hereditary Diseases Council advises the Secretary of Health regarding the disorders to be included in the newborn screening and the required laboratory tests.

*Law No. 51, Jun 7, 1996: It orders the provision of comprehensive educational services to individuals up to 21 years of age who have special educational needs. An Advisory Council must be established by law. Under this law, the DOH is responsible to screen all children born in PR in health facilities across the Island for developmental delay during the first three months of age. Identified children will be referred to the Early Intervention Program (EIP) with parental consent to determine eligibility and to provide services until age 3 years. This strategy will assist the program to increase the number of children detected and enrolled during the first year of age. From ages 3 to 21, the Department of Education is ultimately responsible for providing educational and related services and the required coordination with six other agencies.

*Law No. 311, Dec 19, 2003: Provides for the establishment of a mandatory early hearing screening program for all newborn in PR and requires all health insurers to cover the screening.

*Law No. 238, 2004: Bill of Rights for Persons with Disabilities to adopt public policy to address

the needs of persons with disabilities.

*Law No. 103 of 2004: Bill of Rights of Children and Adults with Autism to establish a comprehensive system of protection for persons with Autism including medical services, education, physical, social and psychological rehabilitation.

*Law No. 351, Sep 2004: To establish a Birth Defect Registry at the PRDOH. This law requires that all providers and agencies which come in contact with cases of birth defects must report them to the PRDOH regardless of gestational age. The Birth Defects Surveillance System program is responsible for developing protocols for an active surveillance system and to establish a data bank to allow research on contributing risk factors to birth defects. The principal objectives of this law pursue the determination of incidence and prevalence rates of selected birth defects in PR, develop prevention strategies, promote early referrals of identified cases to available services and promote the collaboration among the public at large and private partners concerned with this issue. Regulations for this Law were developed and approved by the PRDOH Legal Services in June 2006.

*RC No. 289, 2006: Orders the PRDOH to establish a Register for Children and Adults with Autism.

*Law No. 122, 2006, amended Law No. 318 (Dec 2003), which designated the PRDOH as responsible for developing and implementing public policy for the evaluation, management, and registry of children and adults with autism. This law was implemented to reduce the number of members of the Autism Interagency Committee responsible for developing the public policy for the population with Autism and other disorders under the Autism Spectrum.

*Law No. 3, 2007: Puerto Rico Assistive Technology Program (PRATP) Law requires UPR-PRATP to implement a permanent program of recycling, leasing and reusing assistive technology equipment in coordination with other government agencies. The purpose of the law is to increase access to AT devices and services for persons with disabilities.

*The Birth Defects Surveillance and Prevention System (BDSPS): Continuously promotes awareness of birth defects and associated risk factors in order to prevent occurrence and recurrence in populations at risk. The BDSPS promotes preconceptional care and prevention messages to emphasize the importance of the inclusion of healthy habits in order to help prevent health defects. Culturally sensitive birth defects prevention educational material is distributed among trained collaborators and general public. The BDSPS partners include public and private agencies and other community resources related to public health, health care services, health insurance and education.

*United Funds of PR: The CSHCN director participates with other representatives of the community.

*Law No. 125, 2007: The law that created the Health Services Administration of PR (ASES) was amended to provide medical equipment and nurse specialist home visits for children 0-21 years of age on chronic ventilation via tracheotomy.

*Law No. 176, Aug 2008: Law to Improve Access to Essential Services for People with Severe Disabilities 21 years and older.

*Law No. 259, Aug 2008: To amend Bill of Rights for Persons with Disabilities to assure equal access to public and private programs and services for persons with disabilities.

*In 2008, the Institute for Developmental Deficiencies of the UPR provided TA and trainings to HVNs on the administration and interpretation of the Ages and Stages Questionnaire (ASQ).

Other Collaborations:

*Collaborative efforts are ongoing with the Public Health Emergency Response Preparation and Coordination Office. Currently, more than 30 MCH employees have been trained in the Incident Command System and provided with a curriculum specially prepared to train public health professionals on how to respond in different emergency situations. MCH staff continues participating in their table top and full scale exercises. With their assistance the MCH Emergency Response Plan and COOP plan were prepared.

F. Health Systems Capacity Indicators

Introduction

Obtaining accurate, trustworthy data is vital for an objective analysis and evaluation of the health situation, make evidence based decisions, and develop health promoting strategies aimed at our population. We have set mechanisms to get data from programs and agencies that serve the same target groups. Some DOH programs are Medicaid, Immunization, WIC, ASES, Genetic Counseling Clinics, Pediatric HIV and ASSMCA. Other collaborating agencies and programs include Newborn Screening for Hereditary Diseases, DOE, DOF, Department of Transportation, Police Department, EMCS and Head Start. We also disseminate our information; interested partners may use it for the development of public policy and programs. The SSDI published an MCH Status Book in 2009 to reach our goal. Asthma and ECCS Projects provided CME educational materials or forums aimed at health professionals to increase their skills in these health areas.

Although PR currently faces an economic turmoil, people below 200% State Poverty Level have continued receiving health care insurance through the GIP. We focus our efforts on assuring services included in the health care package are provided to all GIP participants according to the DOH standards of care. Main target areas include expanding our systems capacity to serve GIP participants and improve their health status, eligibility of children and women in Medicaid and SCHIP programs, adequacy of PNC, compliance with EPSDT program, and reducing asthma complications

Health Systems Capacity Indicator 01: *The rate of children hospitalized for asthma (ICD-9 Codes: 493.0 -493.9) per 10,000 children less than five years of age.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	683.7	586.9	437.0	294.4	376.4
Numerator	17618	14766	10820	7121	9211
Denominator	257697	251604	247624	241858	244696
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Numerator: Provided by the Health Insurance Commissioner (HICO) and the PR Health Insurance Administration (ASES).

Denominator: Annual estimates of the population on July 1, 2009 as reported by the US Census Bureau for PR.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Asthma is an important health issue in PR. According to the 2008 Behavioral Risk Factor Surveillance Survey, in PR, approximately 302,000 children under 18 years old (29.0%) were diagnosed with asthma by a health professional at any time in their life. Among them, 13.9 % persisted with asthma. These measures seem higher in Puerto Rican children than in US children. In addition, childhood asthma seems more prevalent in males than in females. During 2008, there was one (1) asthma related death in children 1-14 years old.

The PRDOH faced the asthma burden through the Puerto Rico Asthma Project (PRAP), which is subsidized by the CDC to reduce asthma morbidity and mortality. Since 2003, the PRAP developed and maintain the PR Asthma Surveillance System (PRSS), and has established working committees with the Puerto Rico Asthma Coalition (PRAC) members, pharmaceutical companies and other asthma collaborators to elaborate the State Asthma Plan (SAP). The SAP, a keystone for the control of the asthma in PR, is divided into 7 focal areas: Partnerships, Surveillance, Health Promotion /Education, Public Policy, Environment, Access to Health Services, and Evaluation. Their work plans, activities and interventions are modified and carried out according to the needs and priorities identified by the PRAC and the PRSS.

Although it is difficult to scientifically prove any direct correlation between the SAP interventions and the decrease of asthma hospitalizations, during the periods of Oct-Nov 2006, Sept-Nov 2007, Aug-Sept 2008, and Sept. 2009, the PRAP has offered eight (8) adult and seventeen (17) pediatric asthma management trainings to primary care physicians and other respiratory health care professionals. These interventions were focused on training in the use of the National Asthma Education and Prevention Program (NAEPP) treatment guidelines. The municipalities with higher rates of asthma morbidity and mortality according to the PRSS were selected as sites for these trainings. A total of 1,217 health professionals participated in them. The trainings were successful, since 88% of those that pre-registered attended.

The PRAP and the PRAC identified that an important barrier towards achieving asthma control of moderate to severe asthmatics is the underuse of long-acting asthma medications for the management of their condition. The low prescription is not in accordance with the treatment established in the NAEPP guidelines. Therefore, the PRAP personnel have been collaborating with the PR Senate in the development of the Project 1329, which intends to assure access to asthma control medications for children 0-17.

The MCH Division continues improving and implementing the SAP to help the PRDOH meet the Healthy People 2010 objectives for Focus Area #24 of Respiratory Diseases and to monitor progress regarding Title V performance measures and asthma related indicators.

Health Systems Capacity Indicator 02: *The percent Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	57.9	70.8	91.7	91.5	92.7
Numerator	14051	15489	15770	18678	25176
Denominator	24269	21886	17191	20419	27162
Check this box if you cannot report the numerator because					
1. There are fewer than 5 events over the last					

year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Data represents the GIP sector only. The Health Insurance Administration provided it. These numbers are based on claims. Because there are claims in verification process, we anticipate changes of these provisional numbers.

The GIP eligible population for 2009 was 1,512,038 and 36,673 were infants. This represents 2.4% eligible infants. On the other hand, the GIP insured population was 1,446,671; of these, 33,949 were insured infants. These infants correspond to 2.3% of the total GIP insured population. The data show that children less than one year old represent about 2.4% of the eligible population and 2.3% of the total insured population.

Based on the assumption that Medicaid funds in PR are used exclusively to pay for services targeted at the population below 100% SPL, it can be said that the eligible population below 100% SPL were 1,119,880 and those insured were 1,072,830. Therefore, the eligible infants below 100% SPL were 27,162 ($1,119,880 \times 0.024$) and the insured infants were 25,176 ($1,072,830 \times 0.023$).

Notes - 2008

Data represents the GIP sector only. It was provided by the Health Insurance Administration.

The GIP eligible population for 2008 was 1,461,005 and 27,953 were infants. This represents 1.9% eligible infants. On the other hand, the GIP insured population was 1,412,195; of these, 25,195 were insured infants. These infants correspond to 1.8% of the total GIP insured population. The data show that children less than one year old represent about 1.9% of the eligible population and 1.8% of the total insured population.

Based on the assumption that Medicaid funds in PR are used exclusively to pay for services targeted at the population below 100 SPL, it can be said that the eligible population below 100 SPL were 1,074,707 and those insured were 1,037,644. Therefore, the eligible infants below 100 SPL were 20,419 ($1,074,707 \times 0.019$) and the insured infants were 18,678 ($1,037,644 \times 0.018$).

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.

Assuming that in PR the Medicaid funds are used to pay the population below 100 SPL, the eligible population below 100 SPL (Medicaid) were 1,023,847 and those insured were 1,106,145. The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old and below of the 100 SPL eligible and insured for the GIP, respectively.

Narrative:

Medicaid funds allotted to PR are significantly lower than for the states. A combination of state, federal (Medicaid and SCHIP) and local (municipal) funds are used to purchase the Government Insurance Plan (GIP) for low income individuals.

PR devoted \$1,495 million to finance the GIP for persons with incomes below 200% of the State Poverty Level (SPL) during FY 2009. The Medicaid funding was \$192.6 million, 10% less than FY 2008 (\$216.1 million).

The current health delivery system uses a capitated managed care model. Providers receive a fixed amount of dollars per patient per month to cover all individual medical expenses and services provided. These services are not itemized or separated according to the funding source.

For that reason, the number of infants for this indicator was estimated using the population below the 100% SPL covered by the GIP. Medical Assistance Program uses this SPL to certify health services eligibility mainly through the Medicaid funds. Approximately 2.3% of the total GIP population represents insured infants. This led to two assumptions: the 2.3% represents also the insured infants below the 100% SPL covered by the GIP and, the services these infants received are covered exclusively by the Medicaid funds. Based on these assumptions, we estimated that about 92.7% infants received services through Medicaid funds.

Although this percent was slightly higher than FY 2008 (91.5%), the difference between these two years was statistically significant.

ASES is the agency that provides low income persons access to health services through private health insurances. It also monitors and evaluates contracted insurance companies to ensure choice freedom, quality, and cost-efficiency services.

The integration of data sets provided by insurance companies poses a challenge for ASES because they have different information systems resulting in fragmented data sets.

Beginning September 2010, ASES must have an updated infrastructure because the GIP will have a new integrated health model. The GIP will include access to specialists without referrals inside the preferred network, will eliminate the primary provider prescription authorization; will integrate mental and physical health in one place; will offer extended time in the medical groups (IPAs); and will require quality measures for the services offered by insurance companies.

The SSDI Program continues to work to ensure the MCH Program has access to accurate, real time data from ASES to monitor this HSCI. SSDI staff also works on improving the data linkages between birth records and Medicaid eligibility files. According to the 2007 preliminary Medicaid eligible - birth records linkage file, 79% of infants was GIP eligible.

CHWs, HVNs, perinatal nurses and Medicaid staff educate parents on adequate pediatric care urging them to demand it for their children. They also identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.

Health Systems Capacity Indicator 03: *The percent State Childrens Health Insurance Program (SCHIP) enrollees whose age is less than one year during the reporting year who received at least one periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	57.9	70.8	91.7	91.9	91.4
Numerator	14051	15489	5403	6742	8598
Denominator	24269	21886	5891	7340	9411
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Data represents the Government Insurance Plan sector only. It was provided by the Health Insurance Administration. These numbers are based on claims. Because there are claims in verification process, we anticipate changes of these provisional numbers.

The GIP eligible population for 2009 was 1,512,038 and 36,673 were infants. THSI represents 2.4% eligible infants. On the other hand, the GIP insured population was 1,446,671; of these, 33,949 were insured infants. These infants correspond to 2.3% of the total GIP insured population. The data show that children less than one year old represent about 2.4% of the eligible population and 2.3% of the total insured population.

Based on the assumption that SCHIP funds in PR are used exclusively to pay for services targeted at the population between 101 thru 200% SPL, it can be said that the eligible population was 392,158 and those insured were 373,841. Therefore, the eligible infants between 101 thru 200% SPL were 9,411 ($392,158 \times 0.024$) and the insured infants were 8,598 ($373,841 \times 0.023$).

Notes - 2008

Data for 2008 represents the Government Insurance Plan sector only. It was provided by the Health Insurance Administration.

The GIP eligible population for 2008 was 1,461,005 and 27,953 were infants. This represents 1.9% eligible infants. On the other hand, the GIP insured population was 1,412,195; of these, 25,195 were insured infants. These infants correspond to 1.8% of the total GIP insured population. The data show that children less than one year old represent about 1.9% of the eligible population and 1.8% of the total insured population.

Based on the assumption that SCHIP funds in PR are used exclusively to pay for services targeted at the population between 101 thru 200 SPL, it can be said that the eligible population was 386,298 and those insured were 374,551. Therefore, the eligible infants between 101 thru 200 SPL were 7,340 ($386,298 \times 0.019$) and the insured infants were 6,742 ($374,551 \times 0.018$).

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.

Assuming that the SCHIP funds are used to pay the population between 101 thru 200 SPL, the total eligible population was 350,825 and the total insured population was 379,025.

The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old between 101 thru 200 eligible and insured for the GIP, respectively.

Narrative:

SCHIP Program benefits became available to PR in 1998.

The PR Medical Assistance Program considers children whose families' incomes are above 100% SPL but below the 200% income level mainly for SCHIP funds. Infants may be considered eligible for the GIP even though their mothers may not be eligible. This allows infants whose family income is too high to make them GIP eligible for Medicaid funds but too low to have a private insurance plan.

SCHIP funds received during FY 2008 experienced a huge increase compared to those allotted during FY 2007 (\$88.1million vs. \$42.5 million). This increment was mainly possible due to the unobligated funds of other years. But for FY 2009 an amount similar to FY 2007 was received (\$48.1million). SCHIP funds solely are insufficient to cover the expense associated with providing health services to all SCHIP eligible children. For this reason, state, federal (SCHIP) and local funds (municipal) are combined to finance health care for children with incomes in the 100-200%

SPL range.

A limitation of merging several funding sources is that claims are not itemized nor separated by funding source. For this reason, we assumed the percent of infants between 101 and 200% SPL covered by GIP as a proxy of infants that use SCHIP funds. In addition, infants with GIP represent 2.3% of the total of insured population. According to this percent, we estimate that 8,598 of 9,411 infants between 101 and 200% SPL received services through the SCHIP funds.

The Health Insurance Administration (ASES, Spanish acronym) is the agency that provides low income persons access to health services through private health insurance. It also monitors and evaluates contracted insurance companies to ensure choice freedom, quality, and cost-efficiency services.

Due to the new integrated health model that will take effect on September 2010, ASES is working to enhance their information system in order to collect the new and modified data with this new GIP.

The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data from ASES to monitor this HSCI. In addition, SSDI staff also works on improving the data linkages between birth records and Medicaid eligibility files. These files also include data for SCHIP eligible participants.

A frequent screening test provided to infants born in Puerto Rico is the newborn metabolic screening test. During FY 2008-2009, 45,112 out of the 45,218 registered live births were screened. This figure represents 99.8% of all live births during the reporting year. Preliminary data indicates that 42,957 out of 43,673 (98%) newborns born in 2009 were screened for hearing loss.

CHWs, HVNs, perinatal nurses and Medicaid staff educate parents on adequate pediatric care urging them to demand it for their children. They also identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.

Health Systems Capacity Indicator 04: *The percent of women (15 through 44) with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck Index.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	81.6	81.6	82.7	83.5	83.9
Numerator	36810	36816	35650	35768	36975
Denominator	45130	45130	43125	42859	44080
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Updated data for 2008.

Numerator and Denominator were estimated numbers. Trend analyses were conducted using a logarithmic curve estimation regression model based on the last 9 years (2000-2008), because

Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Data for the analysis was provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2008

Updated data for 2006 and 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA).

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

An attachment is included in this section.

Narrative:

The MCH Program uses data provided in the birth certificate (BC) to calculate the KI. However, 2009 VS data is not available. Trend analysis was conducted using a logarithmic curve estimation regression model based on the last 9 years of data (2000-2008) thru SPSS Program (see Appendix 5).

Trend analysis for 2009 shows that women 15 through 44 years with a live birth whose observed to expected prenatal visits are greater or equal to 80% on the KI was 83.9%. Like previous years, it is expected that the percent of women with a live birth that had an adequate or adequate plus prenatal care (PNC) according to the KI increased with age.

The KI is computed annually and included with other 14 health indicators in the IIMCH. This allows us to track the MCH health status by municipality and health region, helping us to identify those sectors of PR that need intervention to improve their health. The data generated is widely disseminated to concerned entities and stakeholders responsible for promoting first trimester admission and quality of PNC. According to preliminary 2008 data, pregnant women in 82% of all municipalities (n=64) received adequate or adequate plus PNC.

Since the adolescent group has the lowest percentage of adequate PNC, they are being targeted as the number one priority. Pregnant teens are being searched for guidance and support until they initiate PNC provided by an obstetrician. Once they are enrolled in the HVP, nurses visit them regularly and monitor compliance with the PNC Guidelines established by the PRDOH.

The MCH Program is constantly carrying out educational interventions focused on the importance of early and adequate PNC and on compliance with the PRDOH and ACOG PNC guidelines. Special emphasis will be given to disseminating information about early signs and symptoms of pregnancy and the need to request prenatal health care as soon as pregnancy is suspected.

During 2009, trained abstractors collected information from medical records to evaluate the impact of the implementation of the 2005 Revised Birth Certificate (RBC). Concordance measures show that the 2005 RBC is a moderate instrument to gather information concerning PNC. Taking into consideration five visits or more to PNC as the cutoff point, the 2005 RBC had 87% concordance with the medical record and almost perfect (99.8%) sensibility (women in which RBC report five visits or more as well as in the medical record). However, the specificity (women in which RBC report less than five visits as well as in the medical record) is low with 62%. This means that although the RBC guarantee that true positives are high (women that indeed had five visits or more) there is a high probability that many women were identified as having less than five visits when they actually had five or more (false negatives). Once we have several more years of experience with the new RBC we will be able to judge if this is real and not due to changes in the data gathering process

Health Systems Capacity Indicator 07A: *Percent of potentially Medicaid-eligible children who have received a service paid by the Medicaid Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	96.9	95.5	96.7	97.0	97.8
Numerator	568857	535239	506826	461764	534652
Denominator	587041	560295	524288	475893	546669
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

The data was provided by the PR Health Insurance Administration (ASES). These numbers are based on claims. Because there are claims in verification process, we anticipate changes of these provisional numbers.

Data provided for this performance measure for the calendar year 2009 was using as numerator the total number of children 1-19 years old who received services through the GIP. The denominator was the number of children 1-19 years of age potentially eligible for the GIP for the corresponding year.

Notes - 2008

Data provided for this performance measure for the calendar year 2008 was using as numerator the total number of children 1-19 years old who received services through the GIP. The denominator was the number of children 1-19 years of age potentially eligible for the GIP for the corresponding year. The data was provided by the PR Health Insurance Administration (ASES).

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

During FY 2009, PR devoted \$1,495 million to finance the GIP for persons with incomes below 200% of the State Poverty Level (SPL). The Medicaid funding was \$192.6 million, 10% less than FY 2008 (\$216.1 million). Meanwhile, SCHIP funds received during FY 2008 experienced a huge increase compared to those allotted during FY 2007 (\$88.1million vs. \$42.5 million). This increment was mainly possible due to the unobligated funds of other years. But for FY 2009 an amount similar to FY 2007 was received (\$48.1million). State and municipal funds were used to cover the remaining costs associated with providing medical insurance to this special population.

The Health Insurance Administration (ASES, Spanish acronym) administers the GIP while the Medical Assistance Program certifies participants' eligibility. The information used to report this HSCI comes from the ASES information system database which is based on GIP participants' utilization data. The structure of the ASES database presents difficulties in calculating accurately the number of children who received services paid exclusively by Medicaid funds. Currently, the MCH Program is using the total number of children and adolescents in the GIP as a proxy for Medicaid participants.

Approximately 98% of all GIP eligible children received services paid by Medicaid. Paid services include visits to providers, specialists or dentists, hospital visits, laboratories, ambulatory services

and pharmacies. It is important to note that not all the parents of children that qualify for the GIP actually enroll them, get their insurance card and access the services included in the benefit package.

For that reason, beginning September 2010 ASES must have an updated infrastructure because the GIP will have a new integrated health model. The GIP will include access to specialists without referrals inside the preferred network, will eliminate the primary provider prescription authorization; will integrate mental and physical health in one place; will offer extended time in the medical groups (IPAs); and will require quality measures for the services offered by insurance companies.

The SSDI Program continues to work to ensure the MCH Program has access to accurate, real time data from ASES to monitor this HSCI. The MCH Program, CHWs and HVNs are constantly reaching out to infants, children and families without health care insurance and referring them to the Medical Assistance Program to undergo an evaluation to determine eligibility. These professionals referred 437 HVP participants to the Medical Assistance Program.

Health Systems Capacity Indicator 07B: *The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	36.5	60.3	48.7	18.0	22.4
Numerator	52439	64311	54343	35988	25003
Denominator	143580	106721	111501	199542	111469
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

These numbers were obtained from the Form HCFA - 416 of the CMS provided by the Health Insurance Administration (ASES, Spanish acronym). Changes in definition items for this Form across the years provoked variations in data. Also, these numbers are based on claims. Because there are claims in verification process, we anticipate changes of these provisional numbers.

The numerator represents the EPSDT eligible children aged 6 through 9 years who received any dental services for the year 2009. The denominator represents all EPSDT eligible children aged 6 through 9 years.

Notes - 2008

The numerator represents the EPSDT eligible children aged 6 through 9 years who received any dental services for the year 2008. The denominator represents all EPSDT eligible children aged 6 through 9 years. These numbers was provided by the Health Insurance Administration (ASES, Spanish acronym).

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Having good oral health is important for the overall health and well-being of children; therefore, monitoring changes pertinent to this measure is a critical function of the MCH Program. This was evidenced in the needs assessment.

During past years, dental caries have been the most common chronic childhood condition reported in Head Start enrollees. For the school year 2008-2009, caries were the most prevalent condition followed in second place by asthma. About 22% of the Head Start participants had caries and 15.9% had asthma. This represents a decrease from the rates reported for 2007-2008, when 27.1% of the enrollees had caries and 15.4% asthma.

In PR, all EPSDT eligible children whose family incomes are below 200% SPL qualify for the medical insurance benefits covered by the GIP. The GIP includes dental benefits for all the children that hold this medical insurance coverage.

During CY 2009, ASES reported 22.4% of all EPSDT eligible children aged 6 through 9 years received any dental services. This represents an increase of 24% when compared with the previous year.

The MCH Program conducted a study to assess the oral health status of a representative sample (1,995) of third grade students. Results showed that 17% of third grade student had evidence of a dental sealant. Statistically significant differences were identified by insurance plan and school type (private vs. public). The study identified two significant barriers to children's good oral health: 1) lack of awareness in the GIP population regarding dental benefits, and 2) the reluctance of general dentists to treat young children.

The MCH Program continues to disseminate the results of the study among dental and health care providers. Also, it was distributed by MCH staff and other collaborators in activities held at the community level including a brochure with information about healthy oral health practices and the dental benefits included as part of the GIP.

During CY 2009, there were 1,342 dentists providing services to GIP participants. However, they are not distributed evenly throughout the Island. About 37% were located in the Greater SJ Metropolitan Area and only 14% provide services to Southwest and Southeastern Regions. We calculated that in the Southeastern Region of PR there were 124 eligible GIP children per dentist and that in the Southwest the rate was 117 children per dentist.

Health Systems Capacity Indicator 08: *The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	0	0	0	0	0
Numerator					
Denominator					
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.			Yes		
Is the Data Provisional or Final?				Final	Final

Notes - 2009

PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

Notes - 2008

PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

Notes - 2007

PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

Narrative:

Puerto Rico does not receive SSI funds. Therefore, no data can be reported for this HSCI.

Health Systems Capacity Indicator 05A: *Percent of low birth weight (< 2,500 grams)*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of low birth weight (< 2,500 grams)	2009	payment source from birth certificate	14.2	11.5	13.2

Notes - 2011

Because 2009 Vital Statistics data was not available, estimated data was obtained through trend analysis for the last 9 years (2000-2008) using a quadratic curve estimation regression model. For the methodology used, refer to the Appendix 5.

Data for the trend analysis was provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Narrative:

PR is not able to classify birth weight by Medicaid and Non-Medicaid population. This is mainly due to the way the GIP is financed. Medicaid funds PR receives are capped and not enough to provide all Medicaid eligible population the GIP medical insurance benefit. Therefore, a significant amount of state and municipal funds must be expended to purchase medical insurance benefits for all the population with incomes below 200% SPL. All of this plus the fact that the GIP uses a capitated managed care system model makes it difficult for ASES to separate claims data generated by Medicaid vs. Non-Medicaid population and for us to calculate this HSCI.

In order to determine birth weight by income level, the MCH Program uses the GIP participants as a proxy of Medicaid participants and Non-GIP for the Non-Medicaid. Information regarding the health plan held by women in PR at the time of delivery is collected in the birth certificate. However, 2009 Vital Statistics data was not fully available; hence trend analyses were conducted using a quadratic curve estimation regression model based on the last 9 years (2000-2008) to project 2009 data.

Based on these categories, the MCH Program estimates that the proportion of LBW babies born to mothers holding GIP card was higher than Non-GIP babies (14.2% vs. 11.5%, respectively). The percent distribution of LBW among Medicaid and non Medicaid infants maintains the same trend as in previous years. It continues to be higher among the Medicaid group.

The MCH Division uses other data sources to monitor LBW rates and to identify factors that may be contributing to the increasing LBW rate in PR. Among them are the ESMIPR (PRAMS-like), descriptive studies, birth certificates and data linkages between birth and death files. Among

those who participated in the 2008 ESMIPR survey, 11% had a LBW infant; 12.7% of the Medicaid participants were LBW compared to 8.6% of the non-Medicaid participants.

Since 2007, the MCH Program has been actively involved with the March of Dimes (MOD) sponsored PR Prematurity Taskforce (PRPT) activities. This taskforce was established to review available data, identify risk factors that contribute to the increase of the preterm birth rate in PR and recommend a strategic plan to reduce prematurity rates and the mortality and morbidity associated with it. As part of the PR MOD PRPT, the MCH Program will collaborate in this year's objective of decreasing late preterm births. New approaches for decreasing this rate, such as the administration of the hormone "17 P", are being evaluated.

Efforts to improve these indicators are conducted by the MCH Program. Through the Home Visiting Program, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors

Health Systems Capacity Indicator 05B: *Infant deaths per 1,000 live births*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Infant deaths per 1,000 live births	2009	payment source from birth certificate	9.1	6.5	7.8

Notes - 2011

Because 2009 Vital Statistics data was not available, estimated data was obtained through trend analysis for the last 9 years (2000-2008) using an inverse regression model. For the methodology used, refer to the Appendix 5.

Data for the trend analysis was provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Narrative:

In PR, state and municipal funds are combined with Medicaid and SCHIP funds to finance the GIP for low-income individuals (below 200% SPL). The MCH Program is unable to differentiate between infants delivered to Medicaid insured mothers from those who were delivered to women whose GIP health insurance was funded with non Medicaid funds. For that reason, the MCH Program uses the GIP participants as a proxy for Medicaid participants when calculating this indicator.

Infant mortality (IM) is a sentinel indicator of the existing socio-economic, health and quality of services in the community. SSDI continuously monitors this indicator and its contributing factors by using linked birth and death data files prepared by OITA.

For 2009 the IM rate for PR was estimated in 7.8 infant deaths per 1,000 live births. For the same year, the IM rate for the Medicaid group was 9.1 deaths per 1,000 live births and 6.5 for the non Medicaid group. Most of the infant deaths occur in the neonatal period (5/1,000 live births).

Collaborative efforts with the March of Dimes (MOD) PR Chapter will allow us to monitor and disseminate information on IM trends and contributing factors for the main causes for IM. The

MCH HV Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors.

Aware of how important it is to understand IM in PR, the PR MCH Program established the Fetal and Infant Mortality Review (FIMR). FIMR complements local population-based fetal and IM data. It identifies critical community strengths and weaknesses as well as unique health/social issues associated with poor outcomes. FIMR was established in PR during 2006 with trainings and workshops; case reviews began during 2009, only on the Mayagüez municipality, although cases from Ponce are expected to be reviewed later on. Until now, recommendations in areas such as nutrition, prenatal care, preconceptive care, support system, education and hospital services were already suggested. It is expected to disseminate these recommendations to the relevant agencies and stakeholders with the objective of decreasing the IM rate in PR.

SSDI continues to share information regarding IM, VS and other MCH indicators with organizations like National Council of La Raza, MOD and the Department of Ob-Gyn of the University of Marshall in West Virginia.

The MCH Program staff continues to provide educational interventions directed at HVNs, providers and the population at large in order to increase awareness of the elevated LBW PR is experiencing and its implication for these infants' survival. During the activities, staff encourages WCBA to abstain from high risk behaviors such as smoking during pregnancy and offers recommendations to reduce this behavior as well as other factors that contribute to poor outcomes.

Health Systems Capacity Indicator 05C: *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester	2009	payment source from birth certificate	74	88.8	84.1

Notes - 2011

Because 2009 Vital Statistics data was not available, estimated data was obtained using cubic regression model through the trend analysis for the last 9 years (2000-2008). For the methodology used, refer to the Appendix 5.

Data for the trend analysis was provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Non Medicaid population represents the infants without GIP.

Narrative:

PR combines state and municipal, Medicaid and SCHIP funds in order to cover the expenses associated with providing medical insurance for those with incomes below 200% SPL. During FY

2009, the Medicaid funding was \$192.6 million, 11% less than FY 2008 (\$216.1 million).

All their individual medical expenses and services provided are not itemized or separated according to the funding source. For that reason, we used the GIP insured as a proxy for the Medicaid group to calculate this indicator. For those categorized as non-GIP in the birth certificate, usually finance these services using private insurance, self-payment or by receiving pro bono services.

This reporting year had a reduction of 1.8% compared with the previous year's rate (82.7%). The most important reduction was in the GIP group (3.5% change) than the Non-GIP group (.6%). This decreasing in the percent of the GIP group was statistically significant compared with the previous year.

Meanwhile, the difference between GIP and Non-GIP groups continues being statistically significant in 2009.

Only the Non-GIP population exceeded the PR Healthy People 2010 goal of 86%.

The SSDI Program conducted a study to determine if the changes in perinatal indicators are genuine or secondary to incomplete data in the birth certificate. Concordance measures show that the 2005 Revised Birth Certificate (RBC) is a moderate instrument to gather information concerning PNC. Taking into consideration five visits or more to PNC as the cutoff point, the 2005 RCB had 87% concordance with the medical record and almost perfect (99.8%) sensibility (women in which RBC report five visits or more as well as in the medical record). However, the specificity (women in which RBC report less than five visits as well as in the medical record) is low with 62%. This means that although the RCB guarantee that true positives are high (women that indeed had five visits or more) there is a high probability that many women were identified as having less than five visits when they actually had five or more (false negatives). Once we have several more years of experience with the new RBC we will be able to judge if this is real and not due to changes in the data gathering process.

The needs assessment confirmed some reasons found in the 2005 study of why women arrive late for prenatal care: a combination of personal and system barriers (transportation problems, lack of health insurance coverage) and health care delivery system barriers (the time lapse between requesting prenatal care and the actual admission to prenatal health services), among others.

MCH staff, being aware of these barriers, is constantly watchful for pregnant women, particularly adolescents, without prenatal care. Once a woman is identified, staff must immediately refer her to the PR Medical Assistance Program and to obstetrical providers' offices to ensure they begin their PNC before the end of their first trimester.

Health Systems Capacity Indicator 05D: *Percent of pregnant women with adequate prenatal care (observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of pregnant	2009	payment source	72.6	84.6	83.9

women with adequate prenatal care(observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])		from birth certificate			
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Notes - 2011

Because 2009 Vital Statistics data was not available, estimated data was obtained through trend analyses for the last 9 years (2000-2008) using an inverse and cubic regression models. For the methodology used, refer to the Appendix 5.

Data for the trend analysis was provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Narrative:

As mentioned previously, due to the way in which GIP is financed, the Medicaid cap and the capitated managed care system model adopted by the GIP, it is very difficult for us to differentiate between services provided under Medicaid from those that are not. On the other hand, since GIP is similar to Medicaid in many aspects, the MCH Program uses GIP participants as a proxy for Medicaid participants and Non-GIP for Non-Medicaid participants.

The adequacy of prenatal care is measured, as in HSCI 4, as the percent of women (ages 15 through 44) with a live birth during the year whose observed to expected ratio of prenatal visits is greater than or equal to 80% on the Kotelchuck Index. Estimated data for 2009 revealed that 72.6% of Medicaid pregnant women and 84.6% non-Medicaid pregnant women had adequate PNC. Thus, the proportion of pregnant women that received adequate prenatal care, as defined by the Kotelchuck Index, is higher for the non-Medicaid population.

According to results of the 2008 ESMIPR study, 95.9% of the non-Medicaid participants initiated the prenatal care during the first trimester of pregnancy compared to 89.8% of the Medicaid population. This rate is consistent with the ones obtained by the Vital Statistics, since the initiation of prenatal care during the first trimester is higher in the non-Medicaid population.

The difference among the Medicaid and non-Medicaid population in terms of initiation of prenatal care may be explained by certain barriers in the health care system or in the individual. The lack of awareness of the signs of pregnancy, psychosocial factors, transportation problems, lack of health insurance coverage, time lapse between requesting prenatal care and the actual admission to prenatal health services are some of the most common barriers among the non-Medicaid population.

The MCH Division developed certain regional activities educating the MCH population in topics such as the importance of prenatal care once pregnancy is known, the importance of early prenatal care and the amount of expected visits during prenatal care. During 2009, the MCH Program offered 385 group activities on the subject of prenatal care reaching 5,508 participants. Also during other activities celebrated regionally, the MCH population received orientation about the GIP.

The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data concerning Medicaid eligible population.

Health Systems Capacity Indicator 06A: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Infants (0 to 1)*

INDICATOR #06 The percent of poverty level for eligibility in the State's	YEAR	PERCENT OF POVERTY LEVEL
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Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.		Medicaid
Infants (0 to 1)	2009	100
INDICATOR #06 The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.	YEAR	PERCENT OF POVERTY LEVEL SCHIP
Infants (0 to 1)	2009	200

Notes - 2011

Data for 2009 was provided by the Medical Assistance Program (Medicaid Program). The percent of poverty level is a State Poverty Level.

Notes - 2011

Data for 2009 was provided by the Medical Assistance Program (Medicaid Program). The percent of poverty level is a State Poverty Level.

An attachment is included in this section.

Narrative:

Due to its territorial status, Puerto Rico received Medicaid funding capped since 1966 under the Social Security Act, Title XIX. The Title XIX stipulates to the Federal Government make financial contributions to the States and territories for the Medicaid program operation. These funds represent approximately 12% of the total cost of health services for persons with limited resources in Puerto Rico.

During FY 2009, PR received \$192.6 million, 11% less than FY 2008 (\$216.1 million). A combination of state and local funds (municipal), Medicaid and SCHIP funds are used to provide services for all low-income individuals through the Government Insurance Plan (GIP). PR has not modified eligibility criteria, despite the recent economic hardships and the reduced revenues this reporting year.

Medicaid funds are used primarily to cover infants whose incomes are below 100% SPL while SCHIP funds are used to provide insurance coverage for children whose income is between 101% and 200% SPL.

Infants born of mothers insured by the GIP can use services up to 6 months after their birth. However, it is very unlikely that infants reach up to 6 months without being certified. Generally, the Medical Assistance Program certifies pregnant women up to two months after the expected delivery, a reasonable time for women to perform the required procedure to be re-certified and evaluate the eligibility of their infants. Those mothers with infants with severe health problems are more likely to begin their GIP evaluation process after two months.

The newborn coverage includes ambulatory services and subsequent hospitalizations if needed.

Prior to qualifying a patient, the PR Medical Assistance Program staff evaluates family income and expenses. Once this evaluation is concluded, Program staff determines the net income of the person or family according to the defined State Poverty Level (SPL). For example, if the net income for one person does not exceed \$800 (200% SPL) they will qualify for the GIP. This SPL was set based on cost of living expenses for PR and the family component (see attachment Table III-1 State Poverty Level).

Newborns may be eligible for SCHIP program even when their mothers do not comply with the Medicaid eligibility criteria. This is done to help families with incomes too high for GIP eligibility but too low for private insurance plan.

For FY 2009, there were about 36,673 infants eligible for the GIP, 31% more than FY 2008

(27,953).

The MCH Program, CHWs and HVNs will continue reaching out to infants, children and families without health care insurance and referring them to the Medical Assistance Program to undergo an evaluation to determine eligibility. During CY 2008, HVNs referred 437 participants to the Medical Assistance Program Offices.

Health Systems Capacity Indicator 06B: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Medicaid Children*

INDICATOR #06 The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.	YEAR	PERCENT OF POVERTY LEVEL Medicaid
Medicaid Children (Age range 1 to 18) (Age range to) (Age range to)	2009	100
INDICATOR #06 The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.	YEAR	PERCENT OF POVERTY LEVEL SCHIP
Medicaid Children (Age range 1 to 15) (Age range to) (Age range to)	2009	200

Notes - 2011

Data for 2009 provided by the Medical Assistance Program (Medicaid Program). The percent of poverty level is a State Poverty Level.

Notes - 2011

Data for 2009 provided by the Medical Assistance Program (Medicaid Program). The percent of poverty level is a State Poverty Level.

Narrative:

PR has not modified the eligibility criteria, despite recent economic hardships and reduced revenues.

The Medical Assistance Office is responsible for determining eligibility criteria based on income level. Qualifying income levels are significantly different in PR from those in the mainland. For example, a family of two (mother and child) with a net income of \$990.00 per month is considered to be 200% below the SPL and, therefore, the child would be eligible for GIP.

Children living in families whose income is in the 100-200% State Poverty Level range can also get the GIP using SCHIP funds; meanwhile, children with income below 100% use Medicaid funds. A combination of state and local funds (municipal), Medicaid and SCHIP funds are used to provide services for all low-income children through the Government Insurance Plan (GIP).

Mothers not insured by the GIP must visit one of the Medical Assistance Program Offices for an evaluation to determine if she and their family qualify for this benefit. Those who qualify for the GIP will have their children covered for one year. Once this time elapses, the mother needs to be recertified in order to continue to receive the GIP coverage.

Children may be eligible for SCHIP program even when their mothers do not comply with the Medical Assistance Program eligibility criteria. This protects families with incomes too high to make them GIP eligible for the Medicaid funds but too low to have a private insurance plan.

SSDI is performing a study to estimate the prevalence of uninsured children (0-19 years old) from the 2001-2003 Puerto Rico Health Survey database. The data of 2003 revealed that 5.1% of the population of children and adolescent (0-19 years) in Puerto Rico did not have health insurance. In this population the most prevalent conditions were diseases of the respiratory system (23.9%), diseases of the eye and adnexa (3.6%) and general symptoms and signs (3.2%). The most prevalent causes for hospitalizations were: diseases of the respiratory system (1.1%) and diseases of the digestive system (0.3%) and the most frequent causes for physician's office visits were: diseases of the respiratory system (5.4%), endocrine, nutritional and metabolic diseases (3.7%) and diseases of the digestive system (2.5%).

The PR MCH staff's main role is to provide information to low income children and their families about the GIP benefits and provide them referrals to the Medical Assistance Offices so they can be qualified to receive the services. HVNs and CHWs referred 437 HVP participants to the Medical Assistance Offices.

Health Systems Capacity Indicator 06C: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Pregnant Women*

INDICATOR #06 The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.	YEAR	PERCENT OF POVERTY LEVEL Medicaid
Pregnant Women	2009	100
INDICATOR #06 The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.	YEAR	PERCENT OF POVERTY LEVEL SCHIP
Pregnant Women	2009	

Notes - 2011

Data for 2009 provided by the Medical Assistance Program (Medicaid Program). The percent of poverty level is a State Poverty Level.

Notes - 2011

Pregnant women do not receive SCHIP funds. This information was provided by Medical Assistance Program (Medicaid Program) for 2009.

Narrative:

The Medical Assistance Program (MAP) has established a State Poverty Level (SPL) because the income levels in PR are significantly different from those in the mainland. The MAP reviews documents with information on family income and expenses to classify the eligibility according to SPL. In PR, pregnant women with net incomes 200% below SPL receive GIP sponsored by combined funds, including the Medicaid funds. In the GIP, the obstetrical services are part of carve-out services excluded from the capitated managed care system model. However, in order to qualify for OB coverage under the GIP, women must provide to the MAP Official a positive serological test confirming the pregnancy or a certification of pregnancy including the gestational weeks by the OB. They are free to choose an obstetrician and make an appointment to initiate their PNC.

It is important to indicate that, despite the difficult economic situation, PR has not changed eligibility criteria for pregnant women.

The MAP certifies a pregnant woman up to two months after delivery. Subsequently, she will be notified to return for reevaluation of eligibility in six months or one year, depending on the expected changes in family income. In some situations where additional income can be documented, family benefits may be eliminated or limited to a three-month period.

In 2005, a survey was undertaken by SSDI to study factors that contributed to women entering PNC late or not seeking care at all. The main reasons these women gave for arriving late were: in first place, being unaware of their pregnant status (64.7%) and in second place lack of health insurance at time of conception (21.1%).

The needs assessment confirmed some reasons found in 2005 study of why women arrive late for prenatal care, those related with a combination of personal and system barriers (transportation problems, lack of health insurance coverage) and health care delivery system barriers (the time lapse between requesting prenatal care and the actual admission to prenatal health services), among others.

Pregnant teens are the group that faces the greatest challenges when attempting to initiate PNC early, since many of them: are unaware of their pregnancy; face financial difficulties when they attempt to get their pregnancy test done; and have transportation challenges when they attempt to visit Medical Assistance Program.

Since they represent the group with the lowest percentage of adequate prenatal care, they have become one of our priorities.

The Perinatal Nurses, CHWs and HVNs are constantly reaching out to pregnant women without health care insurance and referring them to the Medical Assistance Program to be evaluated and qualified for GIP benefits. However, regardless of their insurance status, they are also helped to initiate PNC early. About 437 HVP participants were referred to the Medical Assistance Program, according to the Home Visiting Program Report.

Health Systems Capacity Indicator 09A: *The ability of States to assure Maternal and Child Health (MCH) program access to policy and program relevant information.*

DATABASES OR SURVEYS	Does your MCH program have the ability to obtain data for program planning or policy purposes in a timely manner? (Select 1 - 3)	Does your MCH program have Direct access to the electronic database for analysis? (Select Y/N)
<u>ANNUAL DATA LINKAGES</u> Annual linkage of infant birth and infant death certificates	3	Yes
Annual linkage of birth certificates and Medicaid Eligibility or Paid Claims Files	3	Yes
Annual linkage of birth certificates and WIC eligibility files	3	Yes
Annual linkage of birth	3	Yes

certificates and newborn screening files		
<u>REGISTRIES AND SURVEYS</u> Hospital discharge survey for at least 90% of in-State discharges	1	No
Annual birth defects surveillance system	3	Yes
Survey of recent mothers at least every two years (like PRAMS)	3	Yes

Notes - 2011

Narrative:

The MCH Program has a team that monitors changes in health status. The team consists of a Demographer that coordinates the TV Monitoring and Evaluation Unit and SSDI Program, two Epidemiologists, one Evaluator, one Biostatistician, and a cultural Anthropologist. The TVME Unit reports to MCH Director (an OB/Gyn consultant) and receives support from the Pediatrician.

The Office of Informatics and Technology Advances (OITA) provides the linked databases from the birth and infant death files and Medicaid eligible - birth files. The SSDI Program is responsible of the informatics structure that allows data gathering in a uniform, ongoing manner.

Obtaining Newborn Screening Program (NSP) data files compatible with live birth database poses a challenge. The acting CSNCN Coordinator and the Birth Defects Program (BDP) assess the feasibility to contract a company to develop a system that integrates newborn, hearing loss and birth defects screening. A manual linkage is performed by the BDP only for the screen positive newborns since 2009. This objective is the last one for the SSDI Program.

For the cohort 2007 a 99% births-deaths matching was achieved.

Since 2004, the SSDI Program has linked about 85% of Medicaid eligibility records to births records. We must increase successful linking of these two databases to 97%. Presently, the matching for 2007 was 94%.

Birth Records and WIC eligibility files are being linked. In FY 2009, we linked about 95% of cases with 2006 data. However, this linkage was performed using only the demographics information. For 2007 we achieved 92% of matching using probabilistic methodology.

We are currently matching the cases identified by the Birth Defects Surveillance System, which has medical record information their abstractors gather, with vital statistics records. For 2007 and 2008, 10 of 86 and 2 of 102 births/fetal deaths respectively, have been identified as new cases not previously detected by the surveillance system.

We have a like PRAMS survey known as ESMIPR (Spanish acronym) designed to identify and monitor pertinent perinatal information to report progress on such Title V performance. It also provides evidence for program decision-making and policy development. This self-administered questionnaire is done every two years to a sample of about 2,000 post partum women who had a live birth in one of the hospitals that in the previous year had an average of at least 10 deliveries per week. The most recent survey is in 2010. We foresee to participate in the next PRAMS grant.

In 2009, we achieved access to the electronic database of the Monitoring the Future Survey (similar to YRBSS).

We established mechanisms to obtain data from multiple sources: WIC, Medicaid, Immunization, Oral Health Program, ASES, Catastrophic Illness Office and Pediatric AIDS, NSP, Genetic Counseling Clinics, Insurance Commissioner, Forensic Science Institute, EMSC and the Departments of Police, Education, Family and Transportation.

Health Systems Capacity Indicator 09B: *The Percent of Adolescents in Grades 9 through 12 who Reported Using Tobacco Product in the Past Month.*

DATA SOURCES	Does your state participate in the YRBS survey? (Select 1 - 3)	Does your MCH program have direct access to the state YRBS database for analysis? (Select Y/N)
Youth Risk Behavior Survey (YRBS)	2	No
Monitoring the Future	3	Yes

Notes - 2011

Narrative:

Two PR surveys gather information of tobacco use in the past month by adolescents attending schools: PRDOE Youth Risk Behavior Surveillance Survey (YRBSS) and "Consulta Juvenil" (CJ) by the Administration of Mental Health and Anti-Addiction Services (ASSMCA, Spanish acronym). Last PR YRBSS was done in 2005 and CJ-VII in 2005-2007. A new MOU between ASSMCA and MCAH will enable MCAH the use of CJ data to further analyze teen tobacco use in PR.

The CJ-VII (2005-2007) evidenced a consistent decrease in the percent of students using tobacco products in the past month for the past ten years: 9th grade from 22.5% (1997) to 5.6% (2007); 10th grade from 25.4% (1997) to 8.3% (2007); 11th grade from 21.8% (1997) to 10.3% (2007) and 12th grade from 24.4% (1997) to 11.7% (2007).

The reduction in the number of students who smoke in the past month can be attributed to many proactive efforts of several entities. Currently, PR is one of the jurisdictions with the most restrictive and comprehensive legislation in tobacco control use and protection of secondhand smoke exposure (Americans for Nonsmokers Rights, 2009). This achievement is due to four major efforts: 1) the creation of the Coalition for a Tobacco Free PR (CTFPR) (1993), 2) the implementation of the PR Quitline (PRQ) (2004), 3) the approval of the Act. No. 66 (2006), 4) Tobacco Control Summit (TCS).

The CTFPR is composed by representatives of public and private agencies and the academia, who work in the establishment of public policy and the implantation of new strategies to prevent and control tobacco use. PRQ provides free professional telephone counseling to quit smoking for residents of PR. The approval of the Act No. 66 which amended the Act No. 40 of the August 3, 1993 (Act to regulated smoking in certain public and private places.) turned the island into a smoke-free country. Among the regulations contained in the amendments approved in 2006 and implanted in 2007, is the ban on smoking in public places such as restaurants, cafeterias; centers for health services, child care centers or any public or private place that are used to provide care or health services; bars, pubs, discotheques, convention centers, malls and working places, among others. Finally, the TCS brings together experts in the field for discussing tobacco prevention topics with health professionals and the general public. This activity was held in 2002-2008 and in 2010.

Other initiatives to prevent smoking initiation in public school settings include: YHPP of MCAH Adolescent Program develop positive youth development peer to peer activities that include tobacco use prevention in middle and elementary schools. MCAH personnel offered 142 activities to 2,504 students about the effects of tobacco, second hand smoke and promotion of healthy

lifestyles in 2008-2009. ASSMCA also uses the peer group strategy to prevent smoking initiation in public high school settings.

IV. Priorities, Performance and Program Activities

A. Background and Overview

The PR MCH needs assessment process is an ongoing activity carried out on a year round basis. Its purpose is to identify the particular and changing needs of the different MCH population groups. This activity provides the necessary feedback to readjust the MCH work plan to better respond to changes in health needs of the target population. The needs assessment is furnished by the H.P. 2010 national objectives linked to the MCH population (Focus Areas 9, 16 and others); national and state performance and outcomes measures, and the health status indicators established by the MCHB.

Alongside the needs assessment, we also engage in identifying all activities, services and programs in relation to the MCH pyramid levels for each of the population groups. These two proceedings let us to match MCH health needs with available services and to identify disparities in services that should be filled.

Currently, the Title V program has a section comprised of a team of skilled professionals whose main task is to collect the most accurate and timely data to monitor the progress of all performance and outcomes measures, as well as the level of progress in improving the health and well-being of the Puerto Rican MCH population.

Following that, Title V funds are allocated to complement services, to conduct new activities or to implement new programs that will help us to attain the established target of performance and long term outcome measures.

The MCH priorities are determined based on the identified needs, the state capacity to address these needs, the political priorities and input from a broad range of partners including families. The trend analysis for at least five years of the rates of each national and negotiated state performance and outcome measures allow us to set expected targets for future years. According to the required five year Statewide needs assessment process carried out for the 2010-2015 period we submit the following information.

Selection of State Priority Needs:

Forty two (42) issues that are affecting women of reproductive age (WRA), pregnant women, infants, children, adolescents and children with special health care needs (CSHCNs) were identified during the Needs Assessment. Topics such as folic acid consumption, mental health, family planning, STD's, domestic violence and alcohol consumption were among those affecting WRA. For pregnant women, the main issues detected were related to the importance of education/orientation on prenatal care (PNC), early PNC initiation, breastfeeding, perinatal mental health and morbidity. Some of the problems affecting the infant population include immunization, birth defects, neonatal death, respiratory conditions, breastfeeding and prematurity. Other issues identified that are affecting children and adolescents are: overweight or underweight problems; child abuse and neglect; conditions for ambulatory care during pediatric age; mental health in children; uninsured children; morbidity; and drugs, tobacco and alcohol use, sexual behavior, violence and suicide among adolescents. The CSHCN staff identified eight potential priorities based on the needs assessment results. The selected potential priorities were: 1) increase the number of CSHCN with adequate health insurance; 2) improve the referral process; 3) develop continuous and reliable data sources about CSHCN and their families; 4) increase the number of CSHCN that have coordinated care, 5) increase the number of CSHCN that receive family-centered care, 6) increase accessibility to specialists, 7) increase the number of CSHCN families that are well informed and empowered, and 8) increase the number of YSHCN that are well informed on their transition to adult life.

A total of fifteen (15) priority needs were selected based on quantitative and qualitative data

analysis, the extent of the health problem, input from collaborators, state political priorities, accessibility of resources to address documented needs and reliable culturally sensitive treatment of management options. In addition, three (3) priority needs for CSHCN were also selected.

Once these priority needs were identified, MCH staff discussed those needs that the PR MCH Program has the capacity to work with. As a result of the information gathered regarding WRA, pregnant women, infants, children, adolescents and CSHCNs, the PR MCH Program work plan focuses in the ten (10) priorities that follow:

1. Improve WRA health at the time of conception.
2. Develop continuous and reliable data sources and surveillance systems.
3. Decrease premature births.
4. Decrease morbidity due to chronic conditions in the pediatric population.
5. Reduce unintentional injuries among children and adolescents.
6. Strengthen the socio-emotional development in the pediatric population.
7. Promote healthy lifestyles in adolescents.
8. Increase the number of empowered CSHCN families by promoting family competency to identify and manage their child needs through family-centered care.
9. Increase the number of CSHCN that receive coordinated care services.
10. Increase the number of YSHCN that are well oriented for their transition to adult life.

B. State Priorities

The 2010 five year needs assessment identified 10 priorities for maternal, child and adolescent health in Puerto Rico. Following we include the levels of the MCH health services pyramid for each priority. For more details please refer to the Priority Needs and Capacity Section (Part II: Needs Assessment) and to Figure IV-1.

Priority 1: Improve WRA health at the time of conception.

- *SPM 1 (Proportion of women of childbearing age consuming folic acid)
- *SPM 2 (Reduce the prevalence at birth of neural tube defects)
- *NPM 8 (Rate of birth for teenagers aged 15 through 17 years)
- *NPM 15 (Percentage of women who smoke in the last three months of pregnancy)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 2: Develop continuous and reliable data sources and surveillance systems.

- *SPM 3 (The degree to which the PR MCAH Program collects, analyzes, and disseminates findings from data pertinent to ongoing target population health needs assessment)
- *HSCI 9a (The ability of the state to assure MCAH Program access to policy and program relevant information)

This priority is related to infrastructure-building services.

Priority 3: Decrease premature births.

- *SPM 4 (Percent of late preterm births (34-36 weeks of gestation))
- *NPM 15 (Percentage of women who smoke during the last three months of pregnancy)
- *NMP 18 (Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester)
- *HSCI 4 (The percent of women with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck index)
- *HSI 5A and 5B (The rate per 1,000 women aged 15 through 19 years and 20 through 44 years with a reported case of Chlamydia)
- *HSCI 5C (Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 4: Decrease morbidity due to chronic conditions in the pediatric population.

*HSCI 1 (The rate of children hospitalized for asthma per 10,000 children less than five years of age)

*NPM 9 (Percent of third grade children who has received protective sealants on at least one permanent molar tooth)

*NPM 14 (Percentage of children, ages 2 to 5 years, receiving WIC services with a BMI at or above the 85th percentile)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 5: Reduce unintentional injuries among children and adolescents.

*SPM 5 (The rate per 100,000 of emergency room visits due to all unintentional injuries among children aged 1 to 14 years)

*NPM 10 (The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children)

*HSI3A (The death rate per 100,000 due to unintentional injuries among children aged 14 years and younger)

*HSI 3B (The death rate per 100,000 for unintentional injuries among children aged 14 years and younger due to motor vehicle crashes)

*HSI 3C (The death rate per 100,000 for unintentional injuries due to motor vehicle crashes among youth aged 15 through 24 years)

*HSI 4A (The rate per 100,000 of all nonfatal injuries among children aged 14 years and younger)

*HSI 4B (The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among children 14 years and younger)

*HIS 4C (The rate per 100,000 of non fatal injuries due to motor vehicle crashes among youth aged 15 through 24 years)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 6: Strengthen the socio-emotional development in the pediatric population.

*SPM6 (The number of preschoolers presenting behavioral problems)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 7: Promote healthy life styles in adolescents.

*SPM 7 (The degree to which selected organizations incorporate the Positive Youth Development Model in the services provided to adolescents)

*HSI 9B (The percent of adolescents in grades ninth through twelve who reported using tobacco products in the past month)

*NPM 8 (Rate of birth for teenagers aged 15 through 17 years)

*HSI 5A and 5B (The rate per 1,000 women aged 15 through 19 years and 20 through 44 years with a reported case of Chlamydia)

This priority is related to the four levels of service according to the MCH pyramid.

Priority 8: Increase the number of empowered CSHCN families by promoting family competency to identify and manage their child needs through family-centered care.

*NPM 3 (The percentage of CSHCN that receive comprehensive, coordinated, and family-centered services through medical homes)

This priority is related to direct health care services and infrastructure-building services.

Priority 9: Increase the number of CSHCN that receive coordinated care services.

*NPM 3 (The percentage of CSHCN that receive comprehensive, coordinated, and family-

centered services through medical homes)

This priority is related to direct health care services and infrastructure-building services of the pyramid.

Priority 10: Increase the number of YSHCN that are well oriented for their transition to adult life.
*NPM 6 (The percentage of YSHCN who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence)

This priority is related to enabling services.

An attachment is included in this section.

C. National Performance Measures

Performance Measure 01: *The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	96.5	100	100	100	100
Annual Indicator	100.0	100.0	100.0	100.0	100.0
Numerator	24	17	28	18	26
Denominator	24	17	28	18	26
Data Source				PR Newborn Screening Prog.	PR Newborn Screening Prog.
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	100	100	100	100	100

Notes - 2009

FY 2008-2009 data provided by the PR Newborn Screening Program.

Notes - 2008

Data for Fiscal Year 2007-2008 provided by the Puerto Rico Newborn Screening Program.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

Law No. 84, 1987, mandates universal newborn screening for all live infants born in PR. Currently, the Newborn Screening Program (NSP) screens for PKU, Congenital Adrenal Hyperplasia, Galactosemia, Hypothyroidism, Sickle Cell Anemia and other Hemoglobinopathies.

Recently, the NSP began using the Tandem Mass Spectrophotometer (MS/MS) to detect 20 additional congenital metabolic disorders as part of a pilot test. The first phase of the pilot test included calibrating the machine, conducting proficiency testing and establishing cutoff points. This phase ended in June 2009. During this phase 5,192 test were performed.

Form 6 summarizes the newborn screening activity and its results during fiscal year 2008-2009. During this period, the NSP served 45,112 out of the 45,218 registered live births. This figure represents 99.8% of all live births during the reporting year. Currently, all birthing hospitals are sending their newborn screen samples to the NSP Laboratory.

During FY 2008-09, a total of 235,944 tests were conducted. Abnormal results were found in 8,291 cases. The NSP performed confirmatory tests on all cases with abnormal screening results. Twenty-six (26) cases were diagnosed with a congenital disease. The program identified: PKU-3 cases; hypothyroidism-11 cases; sickle cell anemia-9 cases, two cases of congenital adrenal hyperplasia and one case of galactosemia. In addition, one case of Propionic Acidemia and another case of Methylmalonic Acidemia were identified through the MS/MS pilot test.

All (100%) children with a positive confirmatory test received counseling and follow up treatment. In addition, the NSP made sure parents of children with a confirmed condition received genetic counseling and their children the specialized medical treatment and nutritional follow up they need. Patients that required, either an evaluation by an endocrinologist, attendance to a metabolic clinic or WIC program services received the appropriate referral. The WIC program provided those under five (5) years of age the specialized formulas the specialist recommended.

A total of 1,048 newborns with abnormal hemoglobin traits were detected. Among them nine had sickle cell anemia. Six hundred and sixty seven family members of the neonates with abnormal traits were evaluated in the clinics. Both the children and their parents were tested to detect abnormal hemoglobins. Those with abnormal results received genetic counseling, and referral for treatment.

Title V funds supports eight perinatal nurses throughout the island that regularly visit birthing hospitals. They provide key follow up activities in those cases where NSP is unable to locate the families of infants who screened positive. The MCH staff visit their homes and if necessary summon the help of the Department of the Family or the Police, in an effort to locate them and have them retested.

Perinatal nurses also provide postpartum education, refer potential candidates to primary services and home visiting nurses, disseminate educational materials and collect information. During the reporting period, the perinatal nurses conducted 15,110 individual orientations. In addition, they provided 389 group orientations sessions that benefited 5,730. A total of 1,550 post partum women received specific information regarding neonatal screening.

During CY 2009, the Home Visiting Nurses served 6,425 families of pregnant women and children under 2 years of age. Orientations' regarding the importance of newborn screening for congenital diseases is a topic regularly they include during the interventions with HVP pregnant women. Also the MCH staff reached 151 persons at the community level with orientations concerning the importance of newborn screening for hereditary diseases.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Link infants with genetic and metabolic disorders with nutritional and specialized medical care. Refer children with congenital conditions that require nutritional education and		X		

management such as PKU and galactosemia to the WIC program.				
2. Provide prenatal counseling to all HVP participants regarding the importance of newborn screening.		X		
3. Provide genetic counseling to families of newborns with genetic or metabolic conditions.	X			
4. Educate postpartum women on the importance of asking for newborn screening results during the first visit to their pediatrician.		X		
5. Disseminate educational materials regarding the importance of having newborns whose screening is positive receive a confirmatory test and treatment if diagnosis is confirmed.			X	
6. Provide perinatal education to providers and parents regarding the importance of the newborn screens.			X	
7. Conduct a pilot test to expand the number of conditions the Newborn Screening Program will be testing for.				X
8.				
9.				
10.				

b. Current Activities

The NSP continues to work to ensure that all newborns in PR are tested, abnormal tests confirmed and all those with a confirmed condition receive adequate follow up and treatment.

The new MS/MS machine has allowed the NSP to increase by 20 the number of congenital metabolic conditions for which newborns are being tested. This has increased the cost of testing to \$39.40 per newborn tested. These costs cover materials needed to send and receive samples, testing, confirmatory testing in those that need to be confirmed and counseling activities for parents of those children that test positive. During the first three months of this year, three new cases of newborns with metabolic disorders were identified.

The NSP staff has offered 47 genetic counseling sessions for parents of children who have been found to have abnormal hemoglobin traits.

Phase II of the pilot project ended in February 2010. During this period approximately half (20,000) of the newborn samples were tested. Since then testing has been expanded to include all newborns.

The NSP is preparing an area to install another MS/MS machine to handle the number of tests it will need to perform in a timely manner. A new lab technician was trained to help in the MS/MS laboratory. This will also help insure continuity of services in the event the only available technician becomes sick or goes on vacation.

c. Plan for the Coming Year

Law 84, 1987 includes provisions that requires the Governor to appoint an Advisory Committee to the Secretary of Health to evaluate and recommend the tests required as part of the universal newborn screening program. The Committee members appointments have expired. The MCH and the Birth Defect Registry staff will be submitting a list of potential candidates to the Secretary of Health and the Governor. Once members of the Advisory Committee are officially appointed they will be expected to begin monitoring the results of the pilot project and the experience of the first year of full scale testing. Based on their evaluation of data collected, latest scientific evidence, cost effectiveness of the test and the availability of treatment for the conditions identified by the MS/MS they will provide recommendations on which tests should be included as

part of the mandatory universal screening program.

Once the area that will house the second MS/MS machine is ready the NSP will purchase the machine. This increase in lab capacity will insure timely screening and confirmatory testing for 26 additional conditions. The NSP plan to start testing for Cystic Fibrosis and Biotinidase in the near future, to complete all 28 conditions (excluding newborn hearing screening) recommended by the American College of Medical Genetics.

Efforts will continue to link data of the Universal Newborn Screening Program with data from the Universal Newborn Hearing Screening, Birth Defect Registry and Birth Records. Linking them will be facilitated by the fact that they are all collected around the time of birth and required by law. The UNHSP has already established an electronic system to gather information on all live births in key birthing hospitals. It includes fields where data related to follow up activities and tracking of suspected cases can be entered. This electronic infrastructure can provide an electronic infrastructure on which to build and add additional information that is pertinent to the other programs and registries. Linking all these data bases and program efforts will help us ensure participants in these programs are not lost to follow up and receive timely confirmatory tests and treatments and will allow us to detect infants who may have received one of the screenings but not the other. In addition, it will reduce data entry time, the need for additional equipment and technical support. It should also help with quality assurance, documentation of appropriate follow up of infants with positive screening tests, and timely treatment of confirmed cases.

Form 6, Number and Percentage of Newborns and Others Screened, Cases Confirmed, and Treated

The newborn screening data reported on Form 6 is provided to assist the reviewer analyze NPM01.

Total Births by Occurrence:	45218					
Reporting Year:	2009					
Type of Screening Tests:	(A) Receiving at least one Screen (1)		(B) No. of Presumptive Positive Screens	(C) No. Confirmed Cases (2)	(D) Needing Treatment that Received Treatment (3)	
	No.	%	No.	No.	No.	%
Phenylketonuria (Classical)	45112	99.8	815	3	3	100.0
Congenital Hypothyroidism (Classical)	45112	99.8	2541	11	11	100.0
Galactosemia (Classical)	45112	99.8	542	1	1	100.0
Sickle Cell Disease	45112	99.8	1047	9	9	100.0
21-Hydroxylase Deficient Congenital Adrenal	45112	99.8	1724	2	2	100.0

Hyperplasia						
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Performance Measure 02: *The percent of children with special health care needs age 0 to 18 years whose families partner in decision making at all levels and are satisfied with the services they receive. (CSHCN survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	45	49	51	54	57
Annual Indicator	44.8	44.8	44.8	44.8	38.7
Numerator	162	162	162	162	67164
Denominator	362	362	362	362	173745
Data Source				2005 Family Survey	PR Survey of CSHCN
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	38.7	38.7	39	39.5	40

Notes - 2009

Indicator data comes from the Puerto Rico Survey of CSHCN conducted by the PR Department of Health, 2008-2009.

Numerator and denominator are weighted estimates.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The CSHCN Services Section recruited a family representative. This is the first time PR MCH has a family representative among its staff. This young mother of a child with special health care needs began working part time in June 2009. She participated in staff meetings and provided the family perspective in her interactions with the staff.

The Title V CSHCN Committee continued to be a key element for the CSHCN Section decisions. This Committee is composed of approximately 30 associations and diverse public and private agencies, corporate and nonprofit organizations, and CSHCN parents. Some of the stakeholders in the Committee helped with the identification of participants for the 2010 needs assessment. CSHCN families, stakeholders, YSHCN, and MCH staff were identified and invited to participate in the collection of qualitative information.

The PR Survey of CSHCN (PRS-CSHCN), a population-based representative study, was implemented for the first time in 2009 with the objectives to estimate the prevalence of CSHCN, assess met and unmet health service needs and collect data for NPMs 2-6. The Program contracted an independent research company in December 2008 to pilot test the survey

questionnaire, to collect data through telephone interviews with parents/tutors of CSHCN, and to provide the database to the Program for statistical analysis and reporting. The data collection phase was completed in June 2009.

According to the PR Survey of CSHCN, an estimated 87.7% of families reported that the doctor usually or always make the parent feel like a partner in the care of their children with special needs, nevertheless only a 39.5% of families reported to be very satisfied with the services they receive.

Currently PR does not have information about trends based on representative data as this is the first representative study conducted on the island. Previous data was obtained from a family survey implemented at the Pediatric Centers in 2005. The annual performance objective was calculated based on literature review and evaluation of current PR MCH capacity.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Recruitment of a family representative.		X		X
2. Completion of the data collection stage of the PRS-CSHCN and preliminary analysis.				X
3. Identification of participants for the collection of qualitative data from stakeholders, families, YSHCN, and MCH staff.				X
4. Continued communication with stakeholders.		X		X
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

One of the activities completed for the current year is the collection of qualitative data. A total of 39 stakeholders, YSHCN, families, and MCH staff, participated in group dialogues or individual interviews for the identification of needs. Information was collected, transcribed and analyzed. Families and stakeholders also participated in the identification of CSHCN needs and priorities based on the information collected.

The CSHCN Committee has met in four occasions to discuss needs, priorities and strategies. In one of the meetings the PR Family Voices' representative offered a presentation about the legislative process in PR, how to effectively participate in this process, and recommendations to improve communication with legislators.

Currently the family representative is participating in the CSHCN Committee and staff meetings and is helping with the development of informational material for mothers at NICU's.

Analysis of the PR CSHCN Survey data continues, which will serve for decision making, strategic planning and Title V NPM's reporting purposes.

c. Plan for the Coming Year

As a result of the needs assessment and priority setting process, the need for educated and empowered families was identified as one of CSHCN population's priorities. To achieve this, the

CSHCN Committee is planning to develop new strategies to reach and educate CSHCN families. The Program also continues its efforts for the development of networking links with parents, parents' support groups and stakeholders. The main purpose is to educate and empower families in areas such as family centered care, rights, available community based services, among others.

The CSHCN Program will collaborate educating families about the Title V NPMs 2-6 and encouraging their participation at all levels. The Program's family representative will assume a leading role in these activities where family needs will be continually assessed and integrated into the action plan.

The Program will evaluate existing educational material for families and will update as necessary to reproduce and distribute to families. The family representative will identify health fairs and other health activities where CSHCN families attend to participate and reach families.

Data from the first PR Survey of CSHCN will continue to be analyzed and a dissemination plan will be developed to share results with stakeholders and families at local, state and federal levels.

Performance Measure 03: *The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	41	43	45	46	48
Annual Indicator	38.7	38.7	38.7	38.7	24.7
Numerator	127	127	127	127	42510
Denominator	328	328	328	328	171953
Data Source				2005 Family Survey	PR Survey of CSHCN
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	24.7	24.7	25	25	25.5

Notes - 2009

Indicator data comes from the Puerto Rico Survey of CSHCN conducted by the PR Department of Health, 2008-2009.

Numerator and denominator are weighted estimates.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The revised Guidelines for Pediatric Preventive Services were approved by the Secretary of Health. Now the Guidelines include developmental screening with ASQ at 9, 18, and 30 months of age and screening for autism with the M-CHAT at 18 and 30 months of age. These guidelines were promoted by the CSHCN Program, ASES, the PR Society of Pediatrics and the AAP, Puerto Rico Chapter. The CSHCN Program prepared educational materials for pediatricians about the ASQ, benefits of early screening, and a flowchart developed by CDC to implement ASQ in pediatric practices. These materials along with the revised guidelines were distributed to 150 pediatricians during their 2009 Annual Convention. Pediatricians also received information from the AAP about CPT codes including screening for developmental delays and autism.

The CSHCN Program and ASES held meetings to develop and implement the medical home pilot project at the IPA 318 in Cataño. The project was presented to Triple C, the health plan contracted by ASES to cover the region. Strategies were discussed for the education of pediatric staff on family and patient centered care, ASQ, and the IPA linking with community based programs to promote coordinated services. The project was well received by Triple C.

The CSHCN Section continued to participate in the ECCS meetings for the development of medical homes in PR.

The PR Survey of CSHCN is a population-based representative study implemented for the first time in 2009 with the objectives to estimate the prevalence of CSHCN, assess met and unmet health service needs and collect data for NPMs 2-6. According to study results related to medical home, 70.7% of families reported that they have family-centered services; 77.8% reported to have usual sources for sick and well; 46.9% reported not having problems with referrals; and 41.4% experienced effective care coordination. When analyzing the percentage of services which comprise the total of all components of medical home, the result was 24.7%.

Currently PR does not have information about trends based on representative data as this is the first representative study conducted on the island. Previous data was obtained from a family survey implemented at the Pediatric Centers in 2005. The annual performance objective was calculated based on literature review and evaluation of current PR MCH capacity.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Pediatric Preventive Guidelines (EPSDT) were revised for the inclusion of developmental and autism screening, and approved by the Secretary of Health.			X	
2. Promoted the use of ASQ and M-CHAT among pediatricians.		X		
3. Met with ASES and health insurance companies to identify strategies to promote the medical home implementation.				X
4. Continued collaborating with ECCS on the promotion of the medical homes.				X
5. Completion of the data collection stage of the PRS-CSHCN and preliminary analysis.				X
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Changes at political levels and governmental fiscal austerity measures were factors that together affected the continuity of the implementation of the medical home pilot project during 2009. However, the CSHCN Program and ASES have recently resumed discussions about the viability and possibilities of this pilot project.

An activity completed during this current year was the CSHCN Section collaboration with the ECCS Annual Conference.

Analysis of the results of the first PR CSHCN Survey continues for NPM's reporting, decision making and strategic planning purposes.

c. Plan for the Coming Year

The CSHCN Committee identified the need to educate medical students and health professionals about family and patient centered, coordinated, and sensible health care. The Committee presented the idea of developing a sub-committee to collaborate in educational activities for this population. Meetings will continue for the development of this sub-committee and activities.

The CSHCN Program will continue to follow up with ASES to evaluate possibilities for the implementation of the medical home pilot project.

The CSHCN Program will give follow up to the Committee regarding plans to educate medical students and health professionals on medical home components.

The Program will evaluate and update medical home materials for families to continue the reproduction and distribution to families for their empowerment. The family representative will identify health fairs and other health activities where CSHCN families attend to participate and reach families.

The CSHCN Program will continue to participate in ECCS meetings which will allow us to strengthen collaborative efforts for the implementation of medical homes for children in PR.

Data from the first PR Survey of CSHCN will continue to be analyzed and a dissemination plan will be developed to share results with stakeholders and families at local, state and federal levels.

Performance Measure 04: *The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	18	19	20	21	22
Annual Indicator	17.0	17.0	17.0	17.0	40.8
Numerator	53	53	53	53	70051
Denominator	311	311	311	311	171769
Data Source				2005 Family Survey	PR Survey of CSHCN
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and					

2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	40.8	40.8	41	41	41.5

Notes - 2009

Indicator data comes from the Puerto Rico Survey of CSHCN conducted by the PR Department of Health, 2008-2009.

Numerator and denominator are weighted estimates.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The CSHCN Program met with the Office of Patient's Ombudsman (OPP, Spanish acronym) to discuss CSHCN families' issues, especially difficulties to obtain referrals for specialists. The needs to standardize the complaint process and to provide specific steps to follow were also discussed. The Program requested data from OPP about families' complaints to identify priorities and develop strategies to address some of these issues. This request remains unanswered, due to staff reduction in OPP.

The CSHCN Program updated a list of CSHCN diagnoses requested by ASES. The list is intended to serve as a general guide to medical providers and does not exclude any unlisted condition. ASES has standardized the eligibility process for the special coverage for CSHCN by the four health insurance companies under GIP's, and has requested a maximum of three (3) days for these companies to respond to the special coverage requests.

The PR Survey of CSHCN is a population-based representative study implemented for the first time in 2009 with the objectives to estimate the prevalence of CSHCN, assess met and unmet health service needs and collect data for NPMs 2-6. According to results related to this performance measure, an estimated 3% of CSHCN were uninsured at the survey time and 7.4% were uninsured at some time over the previous 12 months. Children had different types of health insurance plans. Over half children (51.1%) have an insurance obtained from parents' employment; 53.8% have the Government Insurance Card (Reform); 1.4% has a military health plan; and 4.3% have another plan that covers for health services. Approximately, 74.8% of parents reported that child's insurance plan usually or always covered child's needs; 51.8% reported that charges not covered by health insurance are usually or always reasonable; and 74.9% reported that the plan usually or always allowed child to see needed providers. The analysis of study results will continue in order to provide data for this performance measure and to develop the annual performance objectives.

Currently PR does not have information about trends based on representative data as this is the first representative study conducted on the island. Previous data was obtained from a family survey implemented at the Pediatric Centers in 2005. The annual performance objective was calculated based on literature review and evaluation of current PR MCH capacity.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service
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	DHC	ES	PBS	IB
1. CSHCN Program met with the Office of Patient's Ombudsman to discuss CSHCN families' issues.				X
2. Update list of CSHCN Dx for ASES.				X
3. Completion of the data collection stage of the PRS-CSHCN and preliminary analysis.				X
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Results of the needs assessment revealed the need to improve health insurance processes, access to referrals, and coverage of specific services for CSHCN. Stakeholders and families identified this need as one of the group's main priority. The Committee recognized that legislation is necessary to address these issues and decided to develop a sub-committee to address this issue. The representative from the PR Family Voices provided the Committee with a lecture on the processes of legislation, and members are considering their involvement in the development of public policy to obtain a comprehensive health insurance plan to address this population's needs.

Puerto Rico is a participant in the Federal Health Reform, and during the month of April 2010 the Governor presented the government's priorities in the implementation of the health reform. The CSHCN Program consider this an opportunity for the inclusion of services that address specific needs such as increased accessibility to referrals, coverage of genetic lab tests, metabolic products, and assistive technology equipment.

Analysis of the results of the first PR CSHCN Survey continues to be done for NPM's reporting, decision making and strategic planning purposes.

c. Plan for the Coming Year

The Program will evaluate and update informational material about GIP for families to continue the reproduction and distribution to families for their empowerment. The family representative will identify health fairs and other health activities where CSHCN families attend to participate and reach families.

The CSHCN Program will give follow up to the Committee regarding plans to collaborate at legislative levels for the improvement of health plan coverage for CSHCN.

Data from the first PR Survey of CSHCN will continue to be analyzed and a dissemination plan will be developed to share results with stakeholders and families at local, state and federal levels.

Performance Measure 05: *Percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
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Annual Performance Objective	70	71	73	75	76
Annual Indicator	68.0	68.0	68.0	68.0	81.8
Numerator	246	246	246	246	142648
Denominator	362	362	362	362	174345
Data Source				2005 Family Survey	PR Survey of CSHCN
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	81.8	81.8	82	82.5	83

Notes - 2009

Indicator data comes from the Puerto Rico Survey of CSHCN conducted by the PR Department of Health, 2008-2009.

Numerator and denominator are weighted estimates.

Notes - 2008

For source information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The CSHCN Program is taking the advantage of the social media as a tool to disseminate information to families. According to a survey from Estudios Técnicos, Inc. approximately 38% of persons 12 years of age and older (1.2 millions) use internet in Puerto Rico. APNI and the AAP PR Chapter created linkages with the Department of Health web page where the Service Directory and other information can be accessed by the public.

The PR Survey of CSHCN is a population-based representative study implemented for the first time in 2009 with the objectives to estimate the prevalence of CSHCN, assess met and unmet health service needs and collect data for NPMs 2-6. According to study results, an estimated 18.2% of parents reported difficulties trying to access community services. Most common reported difficulties to access these services included the following: long waiting lists (74%), not obtaining the services when the child needed them (70%), problems in the communication between service providers (60.8%), not getting needed information (59.3%) and not having enough money to pay for services (46.9%).

Currently PR does not have information about trends based on representative data as this is the first representative study conducted on the island. Previous data was obtained from a family survey implemented at the Pediatric Centers in 2005. The annual performance objective was calculated based on literature review and evaluation of current PR MCH capacity.

The analysis of study results will continue in order to provide data for this performance measure and to develop the annual performance objectives, expected to be reported next year.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Promote the inclusion of the Directory of Services in the web pages of other organizations.		X		
2. Completion of the data collection stage of the PRS-CSHCN and preliminary analysis.				X
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

The Program Family Representative is participating in the updating the information of the CSHCN and Families Service Directory and the identification of community based programs to add to the Service Directory.

As a result of the needs assessment and state priority identification, the need for educated and empowered families was identified as one of the CSHCN population priorities. Empowered families should have access to information on services at the community level to satisfy their needs. The CSHCN Committee is planning to develop a sub-committee to reach and educate CSHCN families, including the preparation of a package with informational material about services and infant developmental stages for new mothers.

Analysis of the PR CSHCN survey data continues, which will serve for decision making, strategic planning and Title V NPM's reporting purposes.

c. Plan for the Coming Year

The CSHCN and Families Service Directory will continue to be distributed to families, professionals, and community programs.

The CSHCN will give follow up to activities planned by the Committee to improve the community based services system.

Data from the first PR Survey of CSHCN will continue to be analyzed and a dissemination plan will be developed to share results with stakeholders and families at local, state and federal levels.

Performance Measure 06: *The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	10	12	14	16	18
Annual Indicator	9.1	9.1	9.1	9.1	26.0

Numerator	9	9	9	9	16205
Denominator	99	99	99	99	62394
Data Source				2005 Family Survey	PR Survey of CSHCNN
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	26	26	26.5	26.5	27

Notes - 2009

Indicator data comes from the Puerto Rico Survey of CSHCN conducted by the PR Department of Health, 2008-2009.

Numerator and denominator are weighted estimates.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The qualitative study "Transition to Adult Life at the Health Level: Experiences and Perceptions of YSHCN" was approved by the IRB on April 16, 2009 and completed on April 23, 2010. In-depths interviews were conducted with three YSHCN between 23 to 28 years of age. The principal objective of the interviews with YSHCN was to know about their perceptions and experiences during the process of transition from the pediatrician to the health adult physician, and to learn about the barriers and facilitating factors that youth face during this period of their lives.

The PR Survey of CSHCN is a population-based representative study implemented for the first time in 2009 with the objectives to estimate the prevalence of CSHCN, assess met and unmet health service needs and collect data for NPMs 2-6. According to results, an estimated 54% of pediatricians informed youth with special health care needs about transition to an adult health care practitioner, 64.3% talked to them about health care needs during adulthood; 27% discussed about obtaining an insurance plan, and 76% encouraged YSHCN on how to be responsible about their health care. The analysis of study results will continue in order to provide more data for this performance measure.

Currently PR does not have information about trends based on representative data as this is the first representative study conducted on the island. Previous data was obtained from a family survey implemented at the Pediatric Centers in 2005. The annual performance objective was calculated based on literature review and evaluation of current PR MCH capacity.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB

1. Collection of qualitative data for the Study "Transition to Adult Life: experiences and perceptions of YSHCN".				X
2. Completion of the data collection stage of the PRS-CSHCN and preliminary analysis.				X
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Collection of qualitative data for the study "Transition to Adult Life at the Health Level: Experiences and Perceptions of YSHCN" was completed with a total of five interviews to YSHCN between 23 to 28 years of age. Interviews were transcribed and organized into themes, categories and case examples through content analysis. Common barriers mentioned by participants were related to the GIP: difficulty in the process of renewal, difficulty in getting and processing referrals, frequent changes of physicians, and long process for the authorization of certain interventions. Other barriers mentioned were the lack of guidance and information for families, and low expectations from teachers and families. On the other hand, the facilitating factor frequently expressed by participants was family support.

Two YSHCN have joined the CSHCN Committee, the first time to have representation of this population. The Committee identified the need to educate medical students and health professionals about the process of transition to adult life of YSHCN and presented the idea of developing a sub-committee for the identification of strategies.

Analysis of the PR-CSHCN survey data continues, which will serve for decision making, strategic planning and the Title V NPM's reporting purposes.

c. Plan for the Coming Year

Data from the first PR Survey of CSHCN will continue to be analyzed and a dissemination plan will be developed to share results with stakeholders and families at the local, state and federal levels

The CSHCN Program will give follow up to the Committee regarding plans to educate medical students and health professionals on the roles they represent in the process of transition of YSHCN.

The Program will evaluate and update informational material about transition to adult life to be distributed to YSHCN, families, and health professionals. The family representative will identify health fairs and other health activities where CSHCN families attend in order to participate and reach families.

Performance Measure 07: *Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	93	94.5	95	95.5	96
Annual Indicator	94.5	94.5	91.2	91.2	55.1
Numerator	926	926	903	903	578
Denominator	980	980	990	990	1049
Data Source				PR Immunization Program	PR Immunization
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	96.5	96.5	96.5	96.5	96.5

Notes - 2009

Data from the Immunization Coverage Evaluation provided by the PR Immunization Program of the Department of Health corresponding to the year 2010. This evaluation provides preliminary information of children 35 months of age. Source of informations is under revision.

Notes - 2008

Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health corresponding to the year 2007. This study surveyed children 35 months of age.

Notes - 2007

Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health corresponding to the year 2007. This study surveyed children 35 months of age.

a. Last Year's Accomplishments

Law 25 of 1983 mandates children living in PR must be immunized according to the latest immunization schedule approved by the Secretary of Health in order to attend schools and universities. The Immunization Program (IP) of the PRDOH has been conducting periodic immunization coverage studies to monitor compliance with established national and local guidelines. For the purpose of the study a full immunization schedule for children 35 months of age consists of 4 DTaP, 3 IPV, 3 HiB, 1 MMR and 3 Hepatitis B vaccines although the current schedule for PR also includes recommendations for Influenza, Hepatitis A, Rotavirus, Pneumococcal vaccines, Varicella Booster, Meningococcal and HPV vaccines.

In 2006, following CDC recommendations the PR Immunization Program discontinued the methodology used locally to conduct vaccine coverage studies and awarded the UPR Medical Sciences Campus School of Public Health a contract to conduct a study using cluster sampling. In 2007, the IP again used their traditional methodology to evaluate immunization coverage rates since the CDC study results were not available at that time. It reflected 91.2% of 35 month olds were up to date in their immunizations.

During this period most of the IP efforts were devoted towards conducting catch up activities to promote compliance with a second Varicella dose among the 11-13 year olds, expanding the age

ranges for the MCV administration to include adolescents between the ages of 11-18 years and administering the HPV vaccine for females between the ages of 11-18.

As part of the Childhood Vaccination Week celebrations 37 special immunization clinics were held and 1,704 vaccines were administered to children under the age of 18. In addition, during the 2009 Back to School Campaign 69 special clinics were held reaching a total 3,725 infant, children and adolescents up to 18 years of age. During the annual 2008-2009 Influenza Vaccine Campaign 107 pregnant women and 8,420 persons between the ages of 1-24 received at least one dose of Influenza Vaccine according to the PR Immunization Registry.

Vaccination coverage levels achieved in PR are a reflection of the multiple collaborative efforts the PRDOH has been able to establish with public and private entities such as WIC, Private Insurance Companies, providers, schools, pharmacies, grocery stores, and pharmaceutical companies, among others. A key collaborator has been the Maternal and Child Health Division. Our Home Visiting Nurses and Community Health Workers are constantly reminding participants and the community at large of the importance of adequately immunizing their children during home visits, school activities and health fairs.

During CY 2008-09, children from the 6,425 families in the HVP were evaluated for the adequacy of their immunization status, counseled and referred for vaccination, if needed. The MCH Division reports that 79.4% of Home Visiting Program participants had an up to date immunization record at the time they were discharged from the program. In addition, 4,197 individuals participated in 481 group meetings where they received information on the importance of children's immunizations.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Assess and promote adequate immunization for children participating in the Home Visiting Program.		X		
2. Collaborate with the Immunization Program initiatives to promote disease prevention.			X	
3. Identify and address system barriers which affect access to immunizations.				X
4. Use diverse community level interventions to disseminate the current immunization schedule.			X	
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

The immunization schedule was reviewed in February 2010 in order to comply with current CDC, ACIP and AAP Guidelines. The schedule now includes a recommendation to vaccinate adolescent males against the HPV infection.

In 2010, the PR Immunization Program performed a study to determine the percentage of 35 month olds and adolescents whose immunization record was in compliance with the current immunization schedule requirements. Preliminary reports reveal 55% of 35 month olds had received a full schedule of age appropriate immunizations against Measles, Mumps and Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B. Coverage for single

antigens among children included in the study were 75% for 4 DTap, 89% for 3 doses of Polio, 86% for 1 MMR dose, 88% for 3 Hepatitis B vaccines and 61% for three Hib vaccines. This decrease in vaccine coverage is explained in part by the shortage of Hib Vaccines. Results of the 2006 CDC study became available in May 2010. It revealed 72% of 19-35 month-olds were up-to-date with their immunizations.

Most of the vaccination efforts this year were devoted to vaccinating against the Influenza A H1N1 Virus. MCH staff participated in the planning and execution of strategic plans to vaccinate pregnant women and children up to 24 years of age. As of June 21, 2010, 575,651, persons including 3,107 pregnant women and 227,377 person between the ages of 6 months to 21 years of age received the vaccine.

c. Plan for the Coming Year

During recent years providing vaccines to children with ease and in a timely fashion have become increasingly difficult. Although most parents seek these services because they want to protect their children from these diseases and because they need to comply with Law 83 before they can enroll their children in day care, preschools, schools and universities, they frequently face many barriers when attempting to do so. Some of these barriers are: reductions in the number of special clinics being held, reduction in the number of pediatricians offering immunization services to privately insured children in PR, local laws that regulate permits needed to store and administer vaccines, low reimbursement fees, multiple vaccines and high cost of these vaccines among others. The 2006 CDC sponsored Childhood Vaccination Coverage confirms this. It showed the group with the lowest vaccine coverage was those that were privately insured and whose parents had the highest incomes

In order to address these challenges the Secretary of Health will be convening a committee to conduct an in-depth analysis of the situation and submit a strategic plan to eliminate them. The main goal will be to increase the number of private pediatricians that provide the service as part of their routine health care maintenance visits. Both the PR Pediatric Society and the PR Chapter of the AAP are also actively promoting the adoption of this practice among their members.

Until a long term solution can be identified and implemented, the PRDOH will continue to provide vaccines to the privately insured pediatric population whose pediatricians are not offering this service in the 5 Regional Immunization Clinics. Several private hospitals have also followed this lead and opened their own special vaccine clinics within their facilities.

The IP will continue to supply VFC providers with the vaccines included in the immunization schedule. Vaccines will be distributed directly to their offices. Once there, providers will be responsible for administering them exclusively to those that qualify (Medicaid eligible, uninsured and underinsured) and for storing them adequately.

We expect the CDC immunization coverage study will be repeated next year after some methodological modifications are made.

Child Immunization Week celebrations will continue to occur every April. Health fairs and special clinics will continue to be organized to help parents access the vaccines. HVNs and CHWs will continue to educate and promote compliance with the vaccine schedule during their home visits and in school activities. HVNs will evaluate the immunization status of their participants and refer those that need vaccination to a clinic or provider that can immunize them.

A special effort is being conducted to increase the number of pediatricians in private practice that enter vaccination data directly into the Immunization Registry web site.

Performance Measure 08: *The rate of birth (per 1,000) for teenagers aged 15 through 17 years.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	37.7	36.2	34.7	33.2	31.7
Annual Indicator	40.5	39.1	36.4	34.2	33.7
Numerator	3561	3433	3221	3002	2958
Denominator	88032	87842	88494	87837	87665
Data Source				Birth Certificate OITA	Birth Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	32.5	31.3	30.1	29	27.9

Notes - 2009

Updated data for 2007 and 2008.

Because Vital Statistics (VS) data was not available for 2009, an estimated data was obtained through trend analysis using the last 9 years (2000-2008) and an exponential curve estimation regression model. For the methodology used, refer to the Appendix 5.

Numerator: Data for the analysis was provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population Estimates provide by the US Census.

Notes - 2008

Updated data for 2006 and 2007.

2008 Numerator: Data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The constant and statistically significant decrease in 15-17 year olds birth rates in PR continued from the decade's highest, 59.9 per 1,000 in 1997 to 34.2 per 1,000 in 2008 with a 6% decrease from 36.4 per 1,000 in 2007 to 34.2 per 1,000 in 2008. The Comprehensive Adolescent Health Program (CAHP) of the MCAH Division continued using the Positive Youth Development (PYD) as its main strategy to promote youth health and prevent high risk behaviors such as premature

and unprotected sex which can lead to teen pregnancy. MCAH personnel offered 4,012 activities with 79,524 participants including themes: TPP, sexuality education, self esteem, sexual development and other related themes.

The MCAH HV nurses visited 1,206 new 15-17 year old pregnant participants and followed up 4,710. Interconceptional care visits (post partum until baby is 24 months old) were offered to 304 new and 6,069 follow up 15-17 year olds as part of services to space future births.

The culturally competent "Reto y Esperanza" PYD Action Guide for PR Adults was piloted and assessed. The PYD community pilot project in rural municipality of Naranjito continued with the participation of 224 youths and 58 adults in three school settings including workshops to promote PYD in communities.

The CAHP's Youth Health Promoters Project (YHPP) continued in 37 public middle schools in PR. A total of 622 YHP ages 12 to 15 (7th to 9th grade) held 155 activities attended by 12,275 participants (11,344 peers and 931 adults) during the school year. Activities focused on health promotion and high risk behaviors' prevention messages to peers, family and community including avoidance of early, unprotected sexual relationships that may lead to teen pregnancies and other consequences. A total of 325 YHP graduated in 9th grade after three years participating in the YHPP.

The YHPP in Juvenile Justice Demonstration Project continued in Girl's Juvenile Detention Center in Ponce. Boy's Project temporary ceased due to re localization. Twelve (12) females participated in twenty (20) workshops and meetings. As part of PYD TPP activity a video on self esteem was produced and discussed with their peers at the final year's activity with two presentations on sexual and reproductive health.

The Secretary of Health acknowledged the decrease in Puerto Rican teen birth rates in the past ten years and dedicated March 2009 Teen Pregnancy Prevention Month to CAHP Youth Health Promoters' work towards teen pregnancy prevention in 38 groups island wide. A representation of 29 YHP and 43 adults participated in the activity that included March 2009 Proclamation and a listening session "Jóvenes concientizan sobre el embarazo en la adolescencia" with eight (8) YHP delegates from three school settings guided by an adult moderator. YHP shared their insights on teen pregnancy, its prevention and their work to raise awareness on its impact to teens and family. Also in March 2009: 132 activities held by YHP and CAHP Regional Coordinators reached 6,682 students and 635 adults, and MCAH personnel held 259 activities to 5,790 participants. Teen pregnancy prevention and PYD were discussed in two sessions of "Hablando de Filantropía", a local radio station (11Q-AM) interview program that reaches the whole island. Three PR and one USA newspapers published articles about the decrease of teen births rates in PR.

Besides activities in March, CAHP Regional Coordinators held 370 educational activities about adolescence health promotion and risk prevention including TPP to 10,036 students and 2,626 adults island-wide. CAHP Central Staff offered four presentations on the impact of teen pregnancies to 100 PRDOE nurses and 300 health professionals.

"Plain Talk/Hablando Claro" (2005-2008) Project in Naranjito PR completed its 2nd community map survey of 223 youths and adults in September 2008. This collaborative effort with Naranjito Teen Program (NTP) and MCAH received an encouraging positive Annie Casey Foundation final evaluation in March 2009.

The Puerto Rico Abstinence Education Program PRAEP reached 10,527 participants including students, parents, teachers and others in 142 activities. A mass media campaign targeting parents on talking about abstinence with their kids was held in TV and Theaters. Interactive workshops for parents and teens on sexuality communication were distributed in CD format. The PRAEP ceased activities on June 2009 due to federal administration closing of all abstinence

education funds.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Disseminate Positive Youth Development (PYD) Model in PR using the Action Guide and Train the Trainer developed by “Reto y Esperanza” Project.			X	
2. Support the PYD community pilot program in Naranjito to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue the CAHP’s Youth Health Promoters Project (YHPP) in public middle schools.			X	
5. Continue the CAHP’s Youth Health Promoters Demonstration Project (YHPDP) in two juvenile Institutions (one male, one female).			X	
6. Facilitate the development of culturally appropriate educational materials and PYD activities to promote healthy behaviors and prevent teen pregnancies.			X	
7. Increase awareness on issues related to teen pregnancies among health professionals and the general public including parents and communities.			X	
8. Support Plain Talk/Hablando Claro Project final evaluation presentation to the community to encourage follow up of activities aimed at enhancing parent-child and adult-youth effective communication about sexuality to prevent teen pregnancies.			X	
9.				
10.				

b. Current Activities

The implementation of PYD model as a teen pregnancy prevention strategy continues. PYD Action Guide adult modules continue in revision.

Youth Health Promoters Project (YHPP) continues in public middle schools. The demonstrative YHPP in Juvenile Justice continues in the girl's facility and was restarted in Bayamón male juvenile institution. The PRDOH applied for Tier 2 Teen Pregnancy Prevention Funds to refine, test and duplicate the YHPP as an evidenced based culturally competent innovative strategy in middle schools and juvenile institutions in PR.

The report of the study "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in Bayamón Health Region" was completed, and presented to youths, health professionals and the general public as part of Proclamation of March Teen Pregnancy Prevention Month by the PR Secretary of Health. This qualitative study analysis presented new paradigms to work with youths about teen pregnancy and motherhood in PR. Island wide activities also were held in March.

Plain Talk/"Hablando Claro" Project final evaluation was used to prepare a presentation to be given to the community.

CAHP Director was selected as AMCHP Scholar on Adolescent Reproductive and Sexual Health

Disparities. A work committee was created to address ARSH disparities in PR that include experts in: mental health, STD/HIV, qualitative teen studies, pregnant and parenting teen programs, family planning and youths.

c. Plan for the Coming Year

The MCH Division and its adolescent component (CAHP) will continue to address the impact of teen pregnancies and its prevention using PYD strategies. Naranjito Teen Program will continue its collaboration on PYD in communities. PYD Action Guide Youth Modules will be pilot tested and assessed with the collaboration of youths in an alternative school setting. The revised Adult PYD Guide will be offered to CAHP Regional Coordinators which in turn will become trainers of the intervention as PYD Promoters.

CAHP Program's Youth Health Promoters Project will continue being implemented by CAHP Regional Coordinators in public middle schools with the support of the PR Department of Education. The curriculum guide "Jóvenes Saludables en Acción" and the Implementation guide will be completed. The YHPP demonstration project in two juvenile justice institutions will continue in one female and one male institution. Upon approval of PRDOH application for Tier 2 TPP funds to evidence YHPP in PR the Action Plan for its implementation will be started with support of MCAH Division.

CAHP collaboration with programs that provide services and support for pregnant and parenting teens will continue. MCH home visiting nurses will continue offering interconceptional services to adolescent participants to promote they space their future pregnancies.

The presentation prepared by "Hablando Claro" Project 2005-2008 will be shared with the Naranjito's La Sabana community residents, stakeholders and professionals that contributed to the initiative. Project's next steps will be considered.

The CAHP and the Committee to address ARSH disparities in PR will meet to develop specific action plans. The qualitative studies by MCAH and other professionals will be used to provide insight on teen views and to help the group develop culturally appropriate strategies on sexual and reproductive health among Puerto Rican youths. Plans may include development of public policy, law projects or specific strategies on themes including youth of variant sexual orientation, pregnant teens, adolescent sexual and reproductive rights and services among others.

MCH Division will continue gathering information from Vital Statistics to update trends in teen birth rates by age groups for each municipality. This information will be used by CAHP in educational presentations and collaborative efforts with different government agencies and in each PRDOH region or municipalities to address teen pregnancy prevention's specific initiatives. Data will also be shared with interested students and professionals. CAHP will participate in collaborative efforts with mental health ASSMCA "Consulta Juvenil" survey and PRDOE YRBSS to review and propose additional survey questions on PYD and health.

CAHP will continue educating parents, teachers and general public on the importance of connectedness with teens in family, school and community environments in order to protect them from engaging in high risk behaviors.

Performance Measure 09: *Percent of third grade children who have received protective sealants on at least one permanent molar tooth.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	10	6	6.5	7	7.5
Annual Indicator	4.7	3.7	5.1	7.6	6.6
Numerator	5599	4283	5805	8486	7152
Denominator	118237	117161	114666	111098	108269
Data Source				Health Insurance Commissioner and US Census	Health Insurance Commissioner and US Census
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	8	8.5	9	9.5	10

Notes - 2009

Numerator: Data regarding the grade in which children are enrolled is not available in the billing forms. The reported number is an estimation based on the information provided by the Health Insurance Commissioner (HICO) and the PR Health Insurance Administration (ASES) reflects the number of 8 to 9 year old children who received protective sealants on at least one permanent molar tooth during the last year (2009).

Denominator: Estimated Population of children 8 and 9 years old in PR according to the US Census.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

As a result of the implementation of the HCR in PR, all individuals under 200% of the poverty level qualify for a GIP that covers limited dental services. One of the services covered is the application of sealants on permanent molar teeth. Access to dental services for GIP beneficiaries does not require a referral from their PCP. A significant proportion of children with private health insurance also have access to dental care. One of the preventive measures usually included in their benefit packages are sealants for permanent molars.

The most recent study conducted to determine the prevalence of sealants in a representative sample of third grade students attending public and private schools in PR was conducted in 2007 by the MCH Division in conjunction with the Pediatric Dentistry and General Practice Graduate Residency Programs of the UPR Dental School. The study also collected data regarding the

number of untreated and treated cavities and the absence of a primary molar tooth. In order to obtain information regarding their dental health hygiene habits and practices, parents of the participating children were asked to complete a questionnaire with the following variables: use of fluoridated paste, having had a dental visit within the past 6 months, age at first dental visit, sleeping habits, past history of dental caries, dental health insurance status and frequency of dental brushing.

The study concluded that the prevalence of dental sealants among third grade students in PR was 17.1%, which is less than the 29.5% reported US rate for children 6 to 11 years of age. The study found available preventive measures such as sealants were being underutilized despite wide dental health insurance coverage (94%) and that cavities were more frequent in children from low income families. Students from public schools and those holding a government sponsored health plan were less likely to have dental sealants.

This study identified being less than 5 years of age at the time of the first dental evaluation and presence of sealants were protective factors for cavities, and having the last dental visit more than six months ago and going to sleep with a bottle were risk factors.

In order to promote and educate parents regarding good oral health practices the MCH Division developed a brochure entitled "Healthy Smiles, Beautiful Smiles". The brochure pays particular attention to the importance of using sealants to prevent cavity formation and promote tooth preservation. In addition, it stresses these services are included in the GIP package.

The 2008 Revised Pediatric Guidelines include a dental referral for all 12 month old children. This dental evaluation is included in the GIP coverage.

Head Start 2009 report shows that dental cavities continue to be the most prevalent health condition among their participants. Among Head Start children, 22% had dental cavities. Nevertheless compliance with this guideline remains a challenge due to the reduced number of dentists willing to treat pediatric patients. The PR College of Dental Surgeons reports only 71 pediatric dentists in PR and most of them are located in the large metropolitan areas.

During CY 2009, the UPR School of Dentistry Maternal and Child Oral Health Clinic provided services to 56 pregnant women, 83 infants and 140 children. During CY 2009, the Division of Oral Health Services reached a total of 66,954 persons. During their intervention, they shared messages promoting the adoption of good oral health habits. They visited 269 schools and 55 Head Start centers. In total, they provided oral health education to 636 preschoolers, 30,677 students and 35,651 adults. During these interventions, the importance of dental sealants was stressed and participants were notified sealants are covered by the GIP and no PCP referral is required in order to access dental services. They also provide educational material with messages that promote healthy oral habits to prevent future dental disease and information on the oral health services included within the GIP package.

The HVN and Title V CHWs promote the use of oral health services that are available through the GIP. During FY 2008-09, MCH staff offered 109 activities promoting oral health in the pediatric population. A total of 1,349 persons attended these sessions. Topics included were good oral health practices, availability of dental services as part of the HCR benefits, preventing cavities and the benefits of having dental sealants.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Raise awareness among elementary school children and parents about the importance of protective sealants.			X	

2. Disseminate educational materials concerning the importance of protective sealants.			X	
3. Disseminate the results of the recently completed oral health study among health professional and school staff so they can become aware of the importance of promoting behaviors and interventions to improve oral health.		X		
4. Disseminate the results of the Dental Sealant Prevalence Study.				X
5. Disseminate the oral health aspects included in the 2008 Revised Pediatric Care Preventive Guidelines.				X
6.				
7.				
8.				
9.				
10.				

b. Current Activities

PR GIP insurance coverage and its Pediatric Preventive Care Guidelines include dental evaluations beginning at 12 month of age. Despite this there continue to be access problems because only 19 out of the 78 municipalities (24%) have a pediatric dental specialist.

To address this situation the UPR Dental School established MCH Oral Health Center (CSOMI) and the Cantera Dental Home. CSOMI provides services to pregnant women and preschool children from all over PR. The clinic also serves as a training center for general dentist who want to learn the techniques needed to serve this population.

During the current year, dental services for the pediatric population have suffered due to the fiscal crisis. The Oral Health Program of the PR Department of Health has lost its only dentist and program director. Only 5 dental assistants remain in the program to serve the entire Island due to retirement and Law #7. Both clinics sponsored by the School of Dentistry will loose their funding in June 2010.

The Cantera Clinic ceased providing services in December 2009 after it was vandalized. Its staff continues to provide dental evaluations and fluoride applications to approximately 150 children attending the SJ Head Start Centers every week.

Until this situation can be improved the MCH Division is recommending HS and pediatricians to use the Caries Assessment Tool to identify children at increased risk for caries and assign them a priority status for a dental evaluation.

c. Plan for the Coming Year

Efforts directed towards improving the oral health status of the maternal and child population will be centered on promoting healthy oral behaviors and the use of preventive interventions. Our goal will be to educate families and communities on good oral hygiene practices and to empower them to request preventive dental procedures currently covered under the GIP.

We will assist the School of Dentistry and the Cantera Dental Home clinics efforts to obtain economic support. We will disseminate our study findings and other epidemiological data available to justify this funding. We will also alert them to funding opportunities that may arise.

Our MCH staff will work to promote messages directed at increasing the number of parents and children that adopt healthy oral habits and increasing awareness among parents that dental sealants are covered by the GIP and encouraging them to request their application when their

school aged children visit the dentist. MCH staff will share this information when they participate in community and school based activities. Promoting dental sealants will be emphasized particularly among parents of low income children since they were the group less likely to have had a dental sealant application according to the 2007 study.

In addition, the remaining PRDOH Oral Health Program staff will continue their efforts to promote use of dental sealants and healthy oral health habits during their school visits although in a very limited scale.

Performance Measure 10: *The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	1.9	1.8	1.7	0.9	0.9
Annual Indicator	1.3	1.0	1.1	2.4	0.9
Numerator	11	8	9	19	7
Denominator	851730	839172	821286	806246	798343
Data Source				Death Certificate OITA	Death Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	0.8	0.7	0.6	0.5	0.5

Notes - 2009

Because Vital Statistics (VS) data was not available for 2009, an estimated data was obtained through trend analysis using the last 9 years (2000-2008) and an exponential curve estimation regression model. For the methodology used, refer to the Appendix 5.

Numerator: Data for the analysis was provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population Estimates provide by the US Census.

Notes - 2008

2008 Numerator: Data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

For source of information refer to 2006 notes.

Data provided for 2006. Vital Statistics data for 2007 is very preliminary. Data provided by Police

and Institute of Forensic Science shows no significant change compared to 2006 data. Once 2007 data is final it is expected to resemble 2006.

a. Last Year's Accomplishments

For the past decade our vital statistics reports have had unintentional injuries as the principal cause of death for children 1-14 years of age. Most of them were the result of motor vehicle crashes (MVC). Nevertheless, in 2008, deaths due to MVC in children less than 14 years of age represented less than 5% of the total of MVC related deaths in PR.

VS reports for 2008 reveal 13 deaths due to MVC in this age group. Among the 13 dead, 12 were males and 1 female. Five were less than four years of age; one was between the ages of 5-9 and seven between 10-14 years of age. Six were passengers. Using an exponential curve estimation regression model based on the last 9 years (2000-2008) of vital statistics data, we project 7 deaths due to unintentional injuries for 2009. This data was estimated due to the fact that 2009 Vital Statistics data are not available at this time.

During FY 2008-09, the Automobile Accident Compensation Administration (ACAA) reported 9 deaths and 4,143 injuries related to MVC among children 0 to 14 years. For calendar year 2009, the PR Highway Safety Commission report includes 19 deaths due to MVC during this period. Ten of these dead were females and 9 males. Of the total reported deaths 6 deaths due to MVC in 2009 were alcohol related deaths. None of them were among those less than 5 years of age. Three were in children between the ages of 5 and 9 year and three among those in the 10-14 years of age group. The proportion of females to males in these age groups was 2:1. The PR Police Department reports 12 deaths in children 0-9 years old. Eight of them were described as passengers and one was a pedestrian. Seven of them were females and 5 were males.

The PR Traffic Safety Commission recognizes that Driving While Intoxicated (DWI) is the number one cause of fatal crashes in PR. During 2008, 40% of all MVC deaths were alcohol related. To address this PR has passed several laws to deter DWI. Among them are: zero tolerance law for those less than 18 years of age; reduction of permissible BAC to less than .08%; mandatory jail time for a DWI drivers carrying passengers less than 15 years; vehicle confiscation and mandatory 48 hour jail time plus fines for repeat offenders; suspected DWI offenders cannot refuse a BAC sample. To enforce compliance with this laws PR participates in the National Crackdowns. This initiative has helped lower the percentage of alcohol related fatalities. These Crackdowns are accompanied by a mass media campaign that includes radio and TV spots and distribution of printed materials. The campaign targets young adults since they tend to have the highest rate of alcohol related MVC fatalities. The Luis Señeriz Foundation, the local MADD chapter, continued the "Protecting You, Protecting Me" program for school children.

Another preventive measure being promoted locally to prevent MVC related deaths is the use of lap/shoulder seat belts. According to the NHTSA after a decade of minimal enforcement, the usage rate in 2008 decreased to 90.5%.from its highest level of 94.7% in 2007. Child restraint usage decreased from 94.7% in FY 2007, to 88.3% in FY2008. Forty-two local Fire Department stations serving as fitting stations. In addition, 90 firemen serve as certified CPST are promoting their use and proper installation.

In the past, the Safe Kids Coalition led local collaborative efforts to reduce the number of MVC deaths. Nevertheless due to fiscal considerations funds previously allotted for these efforts have been discontinued. The HSC is by law the entity in charge of leading local efforts to reduce MVC fatalities. Their NSC certified safety coordinators offered lectures on highway safety and promoted compliance with current laws to public and private school students.

The MCH staff continued disseminating information directed at preventing MVC-related deaths. Perinatal nurses stress the importance of correctly using the car seat as they educate mothers whose infants are being discharged. Several agencies loan or provide free car seats if requested. Two hundred and seventy two educational activities were offered by MCH staff to promote the

use of car seats. A total of 2,887 persons participated in them. In addition, 273 persons attended 31 activities during which seat belt use was promoted.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Promote adequate use of child restraints as part of the anticipatory guidance given at the community level.			X	
2. Inform families with limited resources about local programs that rent or provide free infant car seats.		X		
3. Disseminate information to adolescents about MVC prevention and alcohol use as a contributing factor in MVC fatalities.			X	
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Efforts to establish an Injury Surveillance System were discontinued when the epidemiologist in charge of the project resigned. Due to economic difficulties no person has been hired to replace her.

This past year, two legislative pieces were presented with the purpose of further reducing MVC related deaths. HR #107 bill would establish a Law mandating all those convicted of driving while intoxicated must install a breath alcohol detector in their car ignition to prevent them from driving if alcohol level detected is more than .02%. Another legislative piece, HR #1242 was also submitted to prohibit the use of a cellular phone while driving.

Despite these efforts, Puerto Rico has still not passed two of the measures that have proven to be effective in reducing alcohol-related fatalities. They are Age 21 MDA and the Zero Tolerance Law for those older than 18. Although there are tougher sanctions for recidivists, identifying recidivists prior to trial is still a problem.

The PRHSC continues its efforts to reduce MVC related deaths. They continue to monitor and promote compliance with local child restraint laws, national crackdowns and mass media campaigns directed at reducing DWI convictions and compliance with local traffic laws. Perinatal nurses stress the need to correctly and consistently use car seats beginning immediately after the infants are discharged from the nursery. CHW conduct interventions to prevent MVC related injuries.

c. Plan for the Coming Year

The MCH Division will convene members that had participated in the SKC efforts and coordinate future collaborative efforts directed at reducing MVC fatalities using evidenced based strategies. Among those that will be invited to participate will be representatives of the Departments of Education, Police, Fire, Family Services, Emergency Medical Services for Children Program, HSC, PR Consumer Affairs Office, MADD PR chapter and ACAA. Collectively we will continue to promote the correct and consistent use of infant safety seats in parades, special public events and while conducting car seat check points near schools and in shopping malls.

MCH personnel will continue to provide educational activities that stress the importance of correctly installing and using car seats every time children travel in a motor vehicle and to promote compliance with, and enforcement of, laws that requires children be restrained while riding in a car, safety approved helmets are used correctly, and promoting drivers abstain from drinking and driving.

The MCH Division will support laws to increase the legal drinking age, lower legal BAC level, delay adolescents' ability to drive without supervision, establish a driver education course, prohibit the use of cellular phones while driving and the installation of alcohol detection devices in the ignition of cars of drivers convicted of DWI.

The PRTSC will continue to serve as the agency with the primary responsibility for managing programs designed to reduce traffic related death and injuries. They have already submitted a comprehensive plan to accomplish these goals. It includes strategies such as: strengthening traffic law enforcement activities related to DWI, seatbelt use, and speeding; promoting the passage of tougher laws to deter alcohol impaired driving, national crackdowns, prevention initiatives directed at reducing alcohol consumption among youth drivers, mass media campaigns to promote highway safety; providing EMTs with additional trainings in order to improve their skill level when managing injured persons due MVC and educating young people on how to prevent driving motor vehicles while intoxicated. Strengthening the permanent child restraint fitting stations and eliminating roadway hazards are also included as part of this plan. To continue reducing fatalities due to motorcycle associated crashes the PRTSC will continue to enforce the licensing and protective gear requirements established by law.

We plan to offer perinatal nurses a refresher course on how to correctly install and inspect car seats so they can continue to help parents whose infants are being discharged from the nursery use their car seats correctly. A special effort will be undertaken to provide the CSHCN population information regarding safe transportation and informing them of existing laws requiring child restraint and seat belt use.

Performance Measure 11: *The percent of mothers who breastfeed their infants at 6 months of age.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective		12.5	13	28	29
Annual Indicator	21.7	26.5	26.5	28.2	25.9
Numerator	89	185	185	248	228
Denominator	410	697	697	880	880
Data Source				ESMIPR	ESMIPR
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	29.7	31.5	33.3	35.1	37

Notes - 2009

Preliminary data provided by the 2010 ESMIPR (PRAMS like survey) from the MCH Program, of the Department of Health.

Notes - 2008

Source of information from the 2008 ESMIPR (PRAMS like survey) from the MCH Program.

Notes - 2007

Data provided was obtained from the 2006 ESMIPR.

a. Last Year's Accomplishments

During the past decade, an increase in the percentage of breastfeeding has been observed in PR, particularly in the immediate postpartum (pp) period. This phenomenon has been the result of a consistent effort of the Puerto Rico Department of Health (PRDOH), its Breastfeeding Promotion Committee and other non government entities across the Island to provide women of childbearing age the support they need to breastfeed their offspring. These efforts included the establishment of a public policy in 1995 by the PRDOH to promote this practice, as well as the passing of several laws to protect breastfeeding rights for women who desire to do so.

To monitor breastfeeding rates in the Island, the MCH Division uses a PRAM's -like survey (ESMIPR, Spanish acronym), in place since 2000. Women in their immediate postpartum period at hospitals in PR with more than 100 live births per year answer a self-administered survey, and are followed up with telephone interviews at 6 and 12 months after their delivery. The 2008 ESMIPR results reveal that 67.7% participants breastfed immediately after birth; 25.8% continued at six months, and 11.2% at 12 months. An overall drop in breastfeeding rates was observed when comparing these results with those of 2006 (immediate pp: 68.6%; 6 months: 26.5%; 12 months: 13.2%) although there had been an improvement in all parameters when compared to 2004 (64.5%; 22%; 12%, respectively). Also, results showed a consistent fall in breastfeeding in all years after initiation at the immediate pp period, which may point to barriers occurring at different levels.

On the other hand, results of the breastfeeding question included in the national birth certificate since 2005 (information is collected at the moment the baby is registered, which must be done no later than 10 days after delivery) has shown a consistent slight increase in breastfeeding rates for the past 5 years in PR (2005: 69.9%; 2006: 69.0%; 2007: 70.6%; 2008: 71.3%; 2009: 73.4%). (2007, 2008 and 2009: preliminary data).

During this period, breastfeeding promotion continued through educational events at community level island wide. The Mayagüez MCH Region held its 6th Breastfeeding Fair to celebrate World Breastfeeding Week in August 2008. About 311 persons took part. In March 2009, they carried out the 2nd Pregnant and Breastfeeding Women Congress, reaching 165 persons.

On October 11th, 2008, several women who lactate and their relatives gathered at two sites in PR, joining at least 25 other countries in a World Synchronized Breastfeeding Event.

MCH and WIC staff from the regions joined forces to celebrate 9 major breastfeeding promotion activities across PR, where pregnant and lactating women were among the 1,538 participants.

CHWs carried out 380 group breastfeeding promotion activities reaching 4,954 persons, while perinatal nurses provided individual counseling and group events to more than 3,328 pregnant and pp women. During 2008, HVNs offered individual prenatal education on the topic to all 6,527 women taking part in the HVP. Also, 1,455 pregnant women and their partners participated in 88 prenatal courses that include the breastfeeding topic.

The PRDOH Breastfeeding Promotion Committee held 6 meetings. Among its tasks, it completed the document "Infant Feeding in Crisis or Emergency Situations" and sent it to the Secretary of Health for evaluation and approval. This guide is intended to be attached to the PRDOH

Emergency Plan to provide assistance to emergency response staff when they come in contact with breastfeeding mothers and their infants. Also, Committee members took part in 6 USBC teleconferences designed to provide state breastfeeding coalitions with new approaches to enhance this practice in their communities. The Committee joined forces with one of its members, the PR LACTA Project, in the planning phase of a national initiative sponsored by DHHS and MCHB, "The Business Case for Breastfeeding", aimed at private entities in PR to elicit their willingness to provide a breastfeeding - friendly environment for staff women at their workplace. A member of the PR Healthy Start Project was selected to participate actively and represent the MCH Division in this initiative.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue collecting data to monitor breastfeeding trends in PR at immediate postpartum period, and when the infant is 6 and 12 months old by using the PRAMS-like bi-annual survey ESMIPR.				X
2. Continue collaborative efforts with other government programs and non-governmental groups to collect data related to breastfeeding practices among their participants.				X
3. Continue providing breastfeeding related topics as part of prenatal courses to be offered island wide to pregnant women, their partners and relatives.			X	
4. Provide group orientations to continue increasing the knowledge at community level of the benefits of breastfeeding.			X	
5. Continue providing educational forums and individual orientations on the benefits of breastfeeding to participants of the Home Visiting Program to motivate them to adopt this practice.			X	
6. Continue collaborating with major partners at public and private sectors in breastfeeding promotion activities at all levels.			X	
7. Collaborate with a key nongovernmental key partner, LACTA Project, to carry out a strategy to establish breastfeeding-friendly settings in the private business sector.			X	
8. Convene the PRDOH Breastfeeding Promotion Committee at least every two months.				X
9.				
10.				

b. Current Activities

The Breastfeeding Committee met 7 times. During this time it collaborated with the PR LACTA Project in the implementation of "The Business Case for Breastfeeding" initiative. A 2-day training activity was carried out with the participation of the Committee members and representatives from public and private institutions selected to deliver the message to the business entities in the community. The MCH Director collaborated with a presentation on current laws related to breastfeeding rights in PR. The PR Healthy Start Project member taking part in this strategy already carried out a presentation at her target business entity (a major local insurance company) to initiate the implementation process. Also, as requested by the Secretary of Health, the committee is revising the document on breastfeeding during emergency situations for its final approval and insertion in the PRDOH Emergency Plan.

In 2009, HVNs reached all 6,890 women participants of the HVP with individual prenatal orientations on breastfeeding. Also, prenatal courses that include this topic continue being offered regularly by MCH staff at the regions to benefit pregnant women and their partners.

CHWs continue promoting breastfeeding through group activities at community level, while MCH perinatal nurses located at hospitals across the Island intervene pregnant and pp women through individual counseling and group events on the subject.

The 2010 ESMIPR reported 66.3% of participants' breastfed immediately after birth.

c. Plan for the Coming Year

During this coming year, the MCH Division will be committed to endorsing efforts and public policies that assure breastfeeding rights at all levels, particularly in the private sector.

We will continue joining forces with key collaborators, like WIC Program and LACTA Project, during their breastfeeding promotion activities. We will give special attention to the business case initiative to increase the number of breastfeeding-friendly companies in the Island. Hopefully, this strategy will help working women at private settings to continue breastfeeding at least throughout their infants' first 6 months of life and increase the breastfeeding rates at this infant's life period in the Island. The MCH Division and the Healthy Start Program will provide the business company selected by our staff member for this activity all the support it needs to make the initiative successful in its work setting. Besides, this strategy may help introduce the concept of developing mother-baby-family friendly hospital settings in the Island, as some of the participants in this project have identified hospitals as their target company.

Health care providers and the community as well will continue receiving information on existing laws and policies related to breastfeeding in PR. Educational material on the subject, particularly Law 79 (2004) and Law 156 (2006), which require public dissemination, will be distributed as needed by MCH staff at regional level as well as other information requested.

CHWs will continue promoting breastfeeding at community level across the Island. Likewise, HVP participants will benefit of individual prenatal education on the benefits of breastfeeding by HVNs to encourage their adoption of this practice and hopefully continue it at least throughout the first six months of their infants' lives.

Breastfeeding information and statistical data will be available through the PRDOH page for health providers and other interested persons to keep them informed and to arouse their interest in promoting breastfeeding among the population they serve.

Performance Measure 12: *Percentage of newborns who have been screened for hearing before hospital discharge.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	50	80	90	98	98
Annual Indicator	74.5	85.0	97.5	97.9	98.4
Numerator	37774	41425	44965	44245	42957
Denominator	50687	48747	46096	45193	43673
Data Source				PR Hearing Screening Program	PR Hearing Screening Program
Check this box if you cannot report the numerator because 1. There are fewer than 5 events					

over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	100	100	100	100	100

Notes - 2009

Data for 2009 provided by the Hearing Screening Program from the PR Department of Health.

Notes - 2008

Data for 2008 provided by the Hearing Screening Program from the Puerto Rico Health Department.

Notes - 2007

Denominator: The number of births reported for 2007 is based on the number of births registered in the Demographic Registry Office through the Inscriptions Report. The annual performance objectives for 2008 to 2011 were revised. Annual performance objective for 2012 was added.

a. Last Year's Accomplishments

One of our objectives last year was to maintain or increase the percentage of newborns screened for hearing loss and to monitor follow up services for identified newborns. The percentage of screened newborns for this reporting year was maintained in 98% as in 2008. The percentage of screened newborns data for 2009 indicated that 42,957 out of 43,673 newborns were screened for hearing loss and, of these, 1,095 (2.5%) were identified with possible hearing loss. During this year, the Universal Newborn Hearing Screening Program (UNHSP) confronted the loss of its Service Coordinator, who was in charge of actively giving follow-up to parents of referred babies for the compliance of the Law No. 311 and its Regulation No. 114 enacted on 2003 and 2004, respectively. During this reporting year, the actual Program Coordinator has been providing consistent follow-up to hospitals in the reporting of cases on a monthly basis, giving follow-up to the different schedule activities of the program, and also has been assuming the responsibilities of the Service Coordinator.

Another objective was to increase the number of children identified by hearing screening tests who received diagnostic testing by 3 months, and treatment before 6 months of age. During 2009, 603 families out of 1,095 identified babies were contacted (55%). We observed an increase of 2% in contacted families in comparison to the year 2008. From the total number of contacted families (603), 252 (42%) cases were closed. Of these, 182 (30%) had normal hearing results; 12 (2%) were closed to several reasons including incomplete or erroneous demographical data, loss of contact, parents' denial to continue the process, and parents moving to the US, among others; and three (0.5%) were identified with hearing loss.

CANU Online system was the principal mechanism during this year to monitor if identified newborns received timely follow up services for diagnostic testing. At the beginning of this reporting year (2009), 38 out of 40 birthing hospitals entered data into the tracking system. However, one of the hospitals closed its Nursery Department, totaling 37 out of 39 birthing hospitals. During 2009, 39 audiologists were registered in CANU Online. The UNHSP actively encouraged and trained community audiologists and birthing hospitals to use CANU Online for follow-up data entry.

UNHSP participated in various educational events to raise awareness about the importance of newborn hearing screening in the general population. During September 2009, the Program Coordinator was invited to give a conference at Turabo University, Cayey's Campus. On the same month, she participated in a Neonatology's Forum to encourage pediatricians to refer

babies at an early age.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Provides follow up tracking to increase the number of newborns who have an audiologic evaluation before three months of age.		X		
2. Develop promotional activities to create awareness of UNHSP in the general population.		X		
3. Supervise UNHSP in hospitals to maintain high quality services.				X
4. Provides information about UNHSP to stakeholders: hospitals, audiologists, speech language pathologists, nurses and physicians.				X
5. Collaborates in the implementation of the UNHSP programs at all birthing hospitals in PR.				X
6. Increase the awareness of the UNHSP CANU Online data tracking system by audiologists to document follow up services.				X
7.				
8.				
9.				
10.				

b. Current Activities

Promotional and educational activities are being implemented to raise awareness among the general population and health professionals regarding the existence of the UNHSP, laws and regulations.

In November 2009, the UNHSP participated in a conference at the Puerto Rico Birth Defects Surveillance System Convention. On the same month, the UNHSP published an article in the newspaper "La Semana" for the general public that included a summary of the stages stipulated on the Law No. 311. During March 2010, the UNHSP offered a workshop to Audiologists about ABR and hearing aid protocols. Audiologists were encouraged to report constantly using the CANU Online system.

In addition, in March 2010, the first campaign for pediatricians was completed. Three hundred seventeen pediatricians were visited on their private practices by sub-contracted personnel that were trained to educate them on the program goals and the importance of early intervention. The purpose of this activity was to increase the number of pediatricians that have knowledge about their responsibilities as stipulated on Law No. 311.

A family's advocate and a service coordinator are currently in the recruitment process to assist the Program Coordinator with follow-up activities.

c. Plan for the Coming Year

The UNHSP will continue its efforts to increase the number of children identified by hearing screening tests who receive appropriate follow up services. To achieve this, the program will attempt to implement the strategies recommended by the National Initiative for Child Health Quality (NICHQ) learning collaborative, as they were found to be effective in reducing the number

of infants and families that are lost to follow up.

Promotional and educational activities will continue to raise awareness among the general population and health professionals of the UNHSP reporting requirements, laws, regulations, procedures and protocols. The UNHSP will also publish an article in newspapers with information about the program goals and its achievements. In addition, an annual stakeholders meeting will be held for all those who participate in the UNHSP to maintain and improve quality control.

The UNHSP is searching to contract a Computer Programmer for the improvement of the existing CANU Online tracking system. The UNHSP is also planning to provide funds for the implementation of internet access to the Pediatric Centers to overcome difficulties on reporting audiological evaluations done after referrals from Newborn Hearing Screening Program at birthing hospitals.

The UNHSP will continue to monitor the health insurance agencies' compliance on covering audiological evaluations of children referred by the Newborn Hearing Screening as part of their benefit package. This obligation is established on Law No. 311, 2003 (Law of Universal Newborn Hearing Screening).

The UNHSP will seek collaboration with the Demographic Registry in order to be able to corroborate if newborns were screened for hearing loss before hospital discharge. This information will help the program to improve the follow-up of not screened babies and to improve statistical data. In addition, the program will contact WIC offices to reinforce the importance of audiological follow-up among participants and will continue with its commitment to educate pediatricians, audiologists, birthing hospitals and parents, in order to achieve its goal of early hearing intervention when appropriate.

Performance Measure 13: *Percent of children without health insurance.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	1	1	1	0.3	0.3
Annual Indicator	1.6	0.3	0.4	10.6	8.6
Numerator	18384	3407	4522	116932	93644
Denominator	1149039	1135559	1121697	1104427	1094273
Data Source				Health Insurance Commissioner Office	Health Insurance Commissioner Office
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot					

be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	8	7.5	7	6.5	6

Notes - 2009

Updated data for 2008.

Numerator: Health Insurance Commissioner Office (HICO), 2009.

Denominator: US Census Bureau, 2009.

Calculation: HICO provides data of insured children in PR for current year. Considering the population estimates by the US Census and the insured children, uninsured children are estimated.

Notes - 2008

Data fro 2008 provided by the Puerto Rico Head Start Program and the US Census Bureau.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

As of July 2008 the US Census Bureau estimated that 1,104,427 children and adolescents 0 to 19 years old lived in PR. According to data provided by the Health Insurance Commissioner Office (HICO), approximately 10.6% of children of 19 years or less were uninsured during 2008.

An important determinant of children and adolescent health is having a health insurance. During FY 2008-2009, the Alliance for Healthy, Active and Well Nourished Children (AHAWNC) conducted a study to estimate the prevalence of overweight and obesity in children included in a representative sample of second, fifth, eighth and eleventh grade students attending public and private schools in PR. As part of the study, a questionnaire to gather information regarding their eating habits and physical activity level of the child and his/her family was distributed, it also included a question that allowed us determine their health insurance status. According to preliminary analysis of the 1,382 students that participated, 46.8% held the GIP; 41.3% a private health plan and 3.0% did not have a health insurance plan.

The MCH Program received the 2003 PR Health Survey (PRHS) database to estimate the prevalence of uninsured children in PR. Although this database is for 2003, it has never been analyzed for this objective and even though is a secondary source of information it provided us valuable information about uninsured children in PR. The data for 2003 revealed that 5.1% of the population of children and adolescent (0-19 years) in PR did not have health insurance. In this population the most prevalent conditions were diseases of the respiratory system (23.9%), diseases of the eye and adnexa (3.6%) and general symptoms and signs (3.2%). The most prevalent causes for hospitalizations were: diseases of the respiratory system (1.1%) and diseases of the digestive system (0.3%) and the most frequent causes for physician's office visits were: diseases of the respiratory system (5.4%), endocrine, nutritional and metabolic diseases (3.7%) and diseases of the digestive system (2.5%).

PR families will take extreme measures and make economic sacrifices in order to provide health insurance for their children. Frequently, young children are included in other family member's health insurance plan, particularly in cases where parents are uninsured and cannot afford to have health insurance.

The health insurance status of the HV participants is evaluated by the HVN. A total of 361 women

received a referral to the Medicaid Program and 437 children 2 years old or less were uninsured and were referred to the Medicaid Program. In addition, during FY 2008-2009 orientation about GIP insurance was offered to 337 participants in 26 activities across the Island.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Conduct outreach activities to identify children without health insurance and refer them to Medicaid for evaluation and qualification.		X		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

For the last 5 years the estimates of uninsured children was using the Head Start (HS) data. HS children are low income children in PR and could represent the maximum number of uninsured children. However, this information was not as accurate or realistic as expected. Therefore, data provided by HICO will be used as the new source to estimate uninsured children in PR.

About 9% of children were uninsured during 2009 (HICO). These findings are far different if data from HS were used. During FY 2009-2010 of the 35,527 preschool children enrolled in the program, 81% held the GIP; 17.8% had a private health plan; and only 0.02% (171) did not have a health insurance plan. Applying 0.02% to the population of children in PR during 2009, only 219 children were uninsured, which is not a realistic number.

MCH Program staff devote most of their work days to performing outreach activities in numerous venues. They're constantly trying to identify pregnant women, children and adolescents with no health care insurance and ensuring they receive GIP insurance benefits if eligible. During this year our 44 CHW's continued to identify Medicaid eligible children and link them with the Medicaid offices closest to their homes.

Determining the health insurance status of HV Program participants and their family members is one of the first tasks the 76 HVN's perform when they enroll new clients into the HVP. Those without insurance receive an immediate referral to the Medicaid Program.

c. Plan for the Coming Year

The MCH Program, CHW's and HVN's will continue reaching out to children and families without health care insurance and provide them with referrals to the Medicaid Program.

Sources for this kind of information are scarce; hence the PR MCH Program will try to identify funds to design a biennial survey that collects representative data for maternal, infant and adolescent aspects. This survey would provide us with valuable information for development of strategies and activities addressed at PR needs. The health insurance status would be amongst

the information obtained in this survey.

Performance Measure 14: *Percentage of children, ages 2 to 5 years, receiving WIC services with a Body Mass Index (BMI) at or above the 85th percentile.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective		13	39	38	37
Annual Indicator	40.3	41.6	39.7	39.0	37.7
Numerator	40159	35112	30647	38372	37635
Denominator	99649	84388	77219	98391	99828
Data Source				PR WIC Program	PR WIC Program
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	38.3	37.8	37.4	36.9	36.5

Notes - 2009

Data for 2009 calculated based on data provided by the PR WIC Program of the Department of Health for the period of January to December 2008.

Notes - 2008

Data for 2008 calculated based on data provided by PR WIC Program of the Department of Health for the period of January to December 2007.

Notes - 2007

Data for 2007 calculated based on data provided by PR WIC Program of the PR Department of Health for the period of October 2006 to September 2007.

a. Last Year's Accomplishments

PR has experienced an increase in the prevalence of obesity in the population and physicians have noted an increase in DM type 2 in the pediatric population. According to the 2008 BRFFS, 64.5% of adults in PR have a BMI over 85%. Revised 2008 WIC program data reported 37.7% of children ages 2-5 enrolled in their clinics had BMI's at or above the 85th percentile.

In 2005, a study was conducted to measure the prevalence of overweight and obesity among a representative sample of 3,026 second graders attending public and private schools in PR. The participating students had their BMI calculated and afterwards classified accordingly. Results showed 24% of second grade students had BMI's above the 95%; 16% had levels between 85-94%. Only 2.7% of the students were underweight. No statistical difference was noted by type of school, age or sex. The results showed the PR prevalence rate was higher than that reported by CDC (16%) for children in a similar age group living in the US, but only slightly higher than observed among Hispanic children living in large urban areas in the US.

To address this high prevalence, the "Niños y Jóvenes Saludables, Activos y Bien Nutridos" Alliance was established. It was designed to provide the organizational structure needed to coordinate and integrate the efforts of government agencies, representatives of the academia and other private entities in their efforts to reduce the obesity prevalence among children living in PR. The Alliance provides its members the opportunity to share resources and initiatives and to establish collaborative agreements that will help achieve the Alliance mission, vision and goals. It has three workgroups: Investigation, Education and Public Policy. The Alliance Education Sub Committee provides technical assistance and evaluates and endorses the educational materials and curricula submitted to them for revision by projects and organizations interested in dealing with the issue. The Public Policy Sub Committee develops and promotes the approval of public policies that promote healthy living. They developed a policy draft that delineates the roles and responsibilities agencies should assume in their fight against the obesity epidemic. It was presented to the Governor in December 2008 for his evaluation and approval. The Alliance Investigation, Evaluation and Surveillance Sub Committee conducted another prevalence study during this period with the purpose of monitoring the progress achieved in our efforts to control the obesity epidemic in PR. On this occasion the study included second, fifth, eighth and eleventh grades students attending both private and public schools in PR. Parents of second and fifth grade students and eighth and eleventh grade students were asked to complete a questionnaire with questions that would allow investigators to gather information regarding their eating and physical activity habits. Preliminary results revealed 38.1% of second grade students and 42.1% of fifth grade students had BMI at or above the 85% for age and sex.

The PR Commission on Nutrition completed the process of culturally adapting the food pyramid for PR children. It was officially launched during a press conference held in March 2009.

The Transformer Club was discontinued and the "PR en Forma" Program was replaced with "Plaza Ejercicio". This program targets the adults and the elderly population. It provides them the opportunity to exercise in the town plaza during the hours of 7-10 am.

We continue to disseminate information regarding local obesity prevalence data to create awareness of the severity of the problem in PR. Sharing this information has increased the general population interest in the topic and has motivated individuals and organizations to start programs and activities directed at reducing the number of local children with BMI above 85%.

Our HVN's and CHW's have promoted healthy eating during their daily activities. During FY 2008-09, they offered 128 activities to promote physical activity and healthy eating as part of the efforts to prevent childhood obesity. A total of 1,846 persons participated in them. In addition, they promoted breastfeeding on 380 separate educational activities attended by 4,954. The topic of adequate nutrition in the pregnant population was offered on 76 different occasions and reached 1,696 persons.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue participating and strengthening the Alliance with the purpose of educating, designing and performing applied research and developing public policy to reduce the prevalence of childhood obesity in PR.				X
2. Analyze data from the study conducted to measure the BMI of a representative sample of students attending grades 2, 5, 8 and 11 in PR, and administer a questionnaire that will help identify their dietary intake and physical activity.				X
3. Establish the baseline work needed to conduct an ethnographic study in the municipality with the highest				X

prevalence of childhood obesity to identify social and cultural variables that contribute to the problem.				
4. Increase communication and collaboration among governmental, private and non profit agencies that are developing research and implementing interventions for the reduction of overweight in children.				X
5. Educate journalists, communicators, media, community representatives and the public at large on issues related to pediatric obesity and encourage healthy eating and daily exercise.			X	
6. Collaborate with other PRDOH secretariats and agencies in their obesity prevention efforts and health promotion activities.				X
7. Collaborate in the elaboration of a public policy to improve the nutritional status and increase the level of physical activity our children and their parents have.				X
8.				
9.				
10.				

b. Current Activities

In July 2009 three local representatives were trained as Body Works Curriculum trainers. The curriculum was designed to help parents and children 8-14 years of age adopt healthy lifestyles. Three Body Works trainings have been offered so far.

The Sports and Recreation Department in conjunction with the PRDOH and the Alliance developed a program called "Juega por tu Salud". Its goal is to help severely overweight middle school children achieve a healthy weight by providing them the opportunity to participate in 4 organized sports tournaments. To help them participate rules and regulations of the games were modified and adapted to their physical ability. Providing information on healthy eating and insuring the availability of healthy snacks during all the activities constitute an integral part of the strategy.

The HS Project selected Healthy Weight as its topic for their Interconceptional Learning Care Collaborative. They have trained staff to offer educational activities on nutritional topics during their interventions.

The PRDOH received CPPW funds. They will be used to promote environmental changes and the implementation of public policies that promote healthy lifestyles. Ten municipalities will benefit from these funds during the next two years. The SANOS Corporation received funds from the RWJF to begin a Healthy Kids/Healthy Communities Project. Their work plan includes promoting public policies and environmental changes that would lead to the adoption of healthy lifestyles.

c. Plan for the Coming Year

Once the preliminary analysis of all the variables included in the 2009 prevalence study are completed, we will convene the Investigation Subcommittee help in the final analysis and interpretation of the results. Based on their conclusions and recommendations a strategic plan will be modified accordingly. Results of the study will be disseminated to the general public and to all those that can help implement the plan.

A one day Symposium is being planned for December 2010. It will serve as a forum in which local researchers from all disciplines will be able to share their findings of their obesity related investigations.

During this year, we will again attempt to obtain the Governor's approval for the Public Policy draft prepared by the Alliance Subcommittee on Public Policy. The document assigns the responsibility of developing a five year strategic plan to stabilize and then reduce the pediatric obesity rates to the Alliance. It also establishes that agencies and organizations must work together to maximize scarce resources and prevent duplicity since no group or agency alone will be able to reduce or eliminate the problem alone particularly in these times of financial crisis. To achieve this, the policy defines the roles and responsibilities assigned to each participating agency or institution once it is finally approved. Finally the document delegates the responsibility of coordinating the response to the Alliance. To insure buy in and compliance with the public policy was sent to the recently appointed agency heads for their revision and commentaries. Once all their input and recommendations are taken into consideration it will be updated and subsequently submitted to the Governor for his approval.

The qualitative study "Low-Income Parents' Perceptions and Behaviors Related to Childhood Eating and Physical Activity: An Ethnographic Assessment of the Gurabo Municipality" will proceed now that it has been approved by the IRB and key informants, participating communities and the investigation assistants have been selected. Once concluded the study will help define the social, cultural, economic and ethnographic factors that contribute to the elevated overweight rate. This new information will help guide changes needed in the strategic plan.

The Alliance Education Sub Committee will continue to meet and partner with stakeholders to disseminate messages regarding the need to increase physical activity and healthy eating habits. Our staff will continue to promote physical activity, breastfeeding, healthy nutrition and compliance with the food pyramid recommendations during their home visits and community based activities.

During this year, we will train and qualify another group of professionals as Body Works trainers. This will provide more parents and teens the opportunity to obtain the information and tools they need to adopt healthy lifestyles.

Performance Measure 15: *Percentage of women who smoke in the last three months of pregnancy.*

Tracking Performance Measures

[Secs 485 (2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective		2.7	2.6	1.4	1.4
Annual Indicator	2.0	1.6	1.1	1.1	1.2
Numerator	20	31	20	20	23
Denominator	1004	1904	1876	1876	1888
Data Source				ESMIPR	ESMIPR
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	1.1	1.1	1.1	1	1

Notes - 2009

Preliminary data provided by the 2010 ESMIPR (PRAMS like survey) form the MCH Program of the Department of Health.

Notes - 2008

Data obtained from the 2008 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Program of the PR Department of Health.

Notes - 2007

Data obtained from the 2008 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Division of the PR Department of Health.

a. Last Year's Accomplishments

The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out every two years by the MCH Division. In the 2008 survey, 1,876 women were interviewed in the immediate post partum period. The prevalence of tobacco use among pregnant women was 2.0% at any time and 1.1% in the third trimester. Of the women who reported smoking at any point during pregnancy, 57.1% (20 women) continued to do so in the last trimester of pregnancy, distributed as follows: 15 (42.9%) smoked fewer than 10 cigarettes per day, 4 women (11.4%) smoked 10-20 cigarettes per day, and 1 (2.9%) smoked more than 20 cigarettes per day. Since the 2002 survey, the prevalence of smoking in the last 3 months has followed an overall downward trend (statistically significant), namely: 2002 (1.8%); 2004 (2.0%); 2006 (1.6%); and 2008 (1.1%).

For 2008, preliminary birth certificate data show 0.02% of new mothers report using tobacco in the 3 months before pregnancy, 0.02% does so in the first trimesters and 0.01% does so during the second and third trimester. In contrast, the 2008 BRFSS revealed that 8% of all women smoked every day or some days (pregnancy status was not ascertained).

The Home Visiting Nurses (HVN) continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2008-2009, a total of 163 educational activities on ETS and smoking prevention were carried out, reaching 2,408 participants.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Share information of the ESMIPR survey with concerned individuals.				X
2. Screen HVP participants for tobacco use and provide	X			

management according to the level of risk.				
3. Update providers' knowledge regarding screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	
5. Disseminate educational materials on adverse effects of high risk behaviors during pregnancy.			X	
6. Increase public awareness of poor birth outcomes associated with risky behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

b. Current Activities

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in educational activities for pregnant women. As of 2009, we no longer use the MOD "Comenzando Bien" prenatal curriculum; instead, we developed a local version that is more pertinent to our participants in both content and format. In 2009, the "No Smoking Day" march in Arecibo had over 300 participants, among general public, pregnant women and children.

In 2009, 67 of those pregnant HVP participants screened reported smoking during pregnancy. Of these, 65 (97.1%) stopped smoking or significantly reduced their tobacco use, and 2 (2.9%) continued smoking at the same rate.

ADFAN of the PR DOF continues to implement its HVP. Their HVNs implement the tobacco use screen and the Smoking Cessation guide, as trained by the HS staff.

The 2010 ESMIPR reported 2.0% (14) of 909 respondents smoked at some point during pregnancy and 1% (11) continued to do so in the last trimester.

During 2009, trained abstractors collected information from medical records to evaluate the 2005 revised Birth Certificate data availability and accuracy. The concordance measures for tobacco and alcohol use could not be measured because there was not enough information to perform this analysis. Several more years of experience with the new birth certificate are needed to judge if this is real and not only due to changes in the data gathering process.

c. Plan for the Coming Year

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse.

CHWs will also continue to include the topics of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses and other educational activities.

Performance Measure 16: *The rate (per 100,000) of suicide deaths among youths aged 15 through 19.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	2.5	1.5	1	1	1
Annual Indicator	2.0	2.4	2.7	3.7	4.4
Numerator	6	7	8	11	13
Denominator	297283	296387	297823	298181	295930
Data Source				Death Certificate OITA	Death Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	2	2	2	2	2

Notes - 2009

Updated data for 2007 and 2008.

Because Vital Statistics (VS) data was not available for 2009, an estimated data was obtained through the trend analysis using the last 9 years (2000-2008) and a linear curve estimation regression model. For the methodology used, refer to the Appendix 5.

Numerator: Data for the analysis was provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population Estimates provide by the US Census.

Notes - 2008

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007, number of events is less than 5 cases. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

During FY 2008-2009, the MCH staff carried out activities related to the mental health of adolescents that are important in preventing suicides. These activities included 352 presentations on self-esteem reaching 6,755 adolescents and 153 workshops on the topic of how adolescents can face and handle their emotions with 1,222 participants. Having the necessary tools to improve and/or maintain self-esteem as well as how to face difficult situations are important to primary prevention of suicides in the adolescent population. Low self-esteem and sentiments like anger and sadness may lead to suicidal ideas they may end in suicide.

The ASSMCA Mental Health Support Line PAS (Spanish Acronym for First Psychosocial Aid) crisis toll free line reported a total of 101,732 calls received related to suicidal ideas, threats and

attempts. The PAS program also offered educational activities on suicide prevention to 1,308 groups attended by 38,449 persons - students, teachers, parents, social workers, health professionals, school counselors, police, community leaders, faith leaders, and the general public. Of these activities, 163 were held in schools and a total of 23,305 students and 1,289 teachers participated.

The Comprehensive Adolescent Health Services (SISA, Spanish acronym) program implemented the "Abracemos La Vida" (Let's Embrace Life) module, which is part of the training program for middle- school students participating in the school-based Youth Health Promoters Project. The module provides youth health promoters and other students in participating schools, with tools to achieve a healthy life including how to face and manage difficult life situations, anger, anxiety, loss and sadness.

The MCH Division contracted the Naranjito Youth Program, Inc., a community-based organization, to establish a pilot Positive Youth Development project in the municipality of Naranjito to promote healthy lifestyles among youth in community contexts.

The Puerto Rico Commission for Suicide Prevention (PRCSP) of the PRDOH, composed of representatives of state agencies and non-profit non-government organizations, distributed "Para Salvar Vidas" (To Save Lives) toolkits targeted at the adult and adolescent population. The kit contains information on crisis intervention services, signs and behaviors associated with suicide in adolescents and adults, and ways to handle these situations. During 2008-2009, the Commission distributed 36,351 information materials that included "To Save Lives" kits, posters, pocket cards and flyers. In addition, 2,600 T-Shirts were distributed. During the reporting period, the Puerto Rico Commission for Suicide Prevention (PRCSP) offered various trainings and workshops directed at social workers, school counselors, teachers, health professionals and community-base organizations workers that were attended by 436 persons. The Commission also held suicide prevention workshops - including a play and health fair- in school settings that were attended by 1,215 students. The PRCSP also participated in mass media communication programs: three radio non-government sponsored programs (community-based, faith organization and medical association) and one television press conference. In addition, five articles and/or news on suicide prevention appeared in one local newspaper and two articles were published in one of the leading newspapers in Puerto Rico.

The PR Suicide Surveillance System was established, however, it ended because the epidemiologist in charge was laid-off due to the PR Fiscal Emergency Law (Law 7).

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Analyze available VS and other data sources on suicide prevalence by geographical areas.				X
2. Provide training to government and non-government health and human service providers in suicide crisis management and prevention.		X		
3. Increase public awareness of the signs and symptoms associated with suicidal ideation by distributing educational materials and providing group orientations and presentations.			X	
4. Implement the "Abracemos La Vida" (Let's Embrace Life) module in the school-based "Promotores de Salud" (Youth Health Promoters) project.		X		
5. Distribute the "To Save Lives" kits developed by the Commission for Suicide Prevention.			X	

6. Promote among the public and professionals the use of the PAS (First Psychosocial Aid) hotline.			X	
7.				
8.				
9.				
10.				

b. Current Activities

The MCH staff continues to hold activities related to the mental health of adolescents. The PAS hotline continues receiving calls for crisis intervention, information, and suicide prevention. The SISA program is offering presentations on Positive Youth Development to school, human service and health professionals. SISA has also been implementing the Let's Embrace Life module in the school-based Youth Health Promoters program.

During this reporting period, the Commission has been carrying out activities around suicide prevention. The PRCSP sponsored the National Suicide Prevention Week held in August 2009 that included a variety of public activities: 1) The National Suicide Prevention Day with 1,300 participants; 2) The "Yo Amo la Vida" (I Love Life) March with 1,000 participants and: 3) Closing activity for the week with 700 participants. It also has continued disseminating information on suicide prevention through workshops, student plays, and health fairs (September to December 2009). Altogether more than 1,500 persons including adolescents participated in these activities. Currently, the PRCSP continues distributing educational materials on the signs and symptoms associated with suicidal ideation and ways to prevent teen suicide. It also continues providing orientations to the public and trainings to professionals of diverse fields on adolescent suicidal behavior -how to manage suicidal attempts and how to identify suicidal signs.

c. Plan for the Coming Year

PRMCH will implement the following plan to address the prevention of teen suicidal behavior and the promotion of healthy lifestyles among youth:

1. Presentations in school and community settings on topics related to adolescent mental health in all health regions.
2. Promote the utilization of the ASSMCA Mental Health Support Line PAS toll free hotline among youth, parents and professionals.
3. Assist the PR Commission for Suicide Prevention in the distribution of the "To Save Lives" kit and other informational packets on adolescent suicide prevention throughout the health regions.
4. The Comprehensive Adolescent Health Services (SISA) will continue conducting presentations to disseminate information on and promote the adoption of the Positive Youth Development - among human and health professionals - as an important strategy for the prevention of high-risk behaviors and the promotion of the health - including mental health - of the adolescent population.

The PR Commission for Suicide Prevention has planned the following activities for the coming year:

1. Train social workers of the Department of the Family in suicide signals and crisis management.
2. Train public school social workers and teachers in suicide signals and crisis management.
3. Conduct a mass media campaign to create public awareness of suicide signals and prevention.

4. Celebrate the National Suicide Prevention Week (August 2010).
5. Celebrate the International Suicide Prevention Day (September 2010).
6. Celebrate the Suicide Prevention Awareness Day (December 2010).
7. Distribute the "To Save Lives" kit and other informational packets on adolescent suicide prevention throughout the eight health regions.
8. Re-establish the suicide surveillance system in Puerto Rico.
9. Establish a collaborative arrangement with the PR Government Office of Human Resources (ORHELA, Spanish acronym) in order to provide training to public officials on suicide prevention.
10. Train staff from the PR Department of Justice on suicide prevention.

Performance Measure 17: *Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	55	45	47	49	51
Annual Indicator	42.3	44.6	53.8	52.3	50.9
Numerator	311	325	351	359	326
Denominator	736	729	652	686	641
Data Source				Birth Certificate OITA	Birth Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	55	57	58	60	62

Notes - 2009

Updated data for 2007 and 2008. Classification according to Perinatal Care Guidelines Review Committee, 2007.

Numerator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Percent change were calculated to estimate 2009 data, Vital Statistics (VS) data was not available for this year.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health. A panel of experts in neonatology of the Pediatric University Hospital provided a list of Level II and III NICUS available in the Island. A revisor Revisor Committee was established to provide a more precise data of the levels of perinatal care in PR.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

Because of the need to be able to identify accurately where VLBW deliveries are occurring in PR, the MCH Program established a Perinatal Care Guidelines Review Committee (PCGRC) in 2007. This is the first initiative of the Puerto Rico Department of Health (PRDOH) aimed to develop uniform guidelines in order to identify the capacity of perinatal care services of Hospitals Island wide. During 2008, perinatal nurses of the MCH Program interviewed medical staff from 34 of the 39 hospitals that were eligible to participate in the study (response rate of 87%). According to PCGRC guidelines, 42% of the hospitals offered only basic perinatal services, 30% specialized services and 27% subspecialized services (24% subspecialized and 3% supratertiary). Most of the subspecialized facilities are located in the Metropolitan Health Region (33.3%), particularly in the municipality of San Juan. A good number of PR Health Regions have at least one specialized or subspecialized facility. However, there is one Health Region on the western side of the Island with only two basic hospitals for 5 municipalities. The PRDOH needs to officially certify the PCGRC guidelines as well as regulate birthing hospitals through these guidelines.

According to Vital Statistic (VS) data and the PCGRC guidelines, the percentage of very low birth weight (VLBW) infants delivered in facilities prepared to manage high risk deliveries and neonates was 52.3% in 2008.

HVNs routinely assess their clients for risks associated with premature delivery. They provide appropriate education / counseling regarding the signs and symptoms associated with premature labor and provide them information regarding the closest birthing facility with Level III perinatal services. During last year, HVNs visited 6,425 families and identified their OB needs. During these visits, 5,032 individual cases in the community were identified as possible candidates to participate in the program or were referred to different health programs.

The "Comenzando Bien" prenatal educational curriculum, developed by March of Dimes (MOD), was offered to pregnant women throughout the island by specially trained and certified facilitators. It included information on the signs and symptoms of a premature delivery. During FY 2008-2009, 12 sessions of the "Comenzando Bien" program reached 129 participants, including pregnant women and their significant others. On the other hand, the MCH Program designed a new Prenatal Course similar to the "Comenzando Bien" prenatal educational curriculum. This Prenatal Course focuses on the special needs of the participants. It is composed of 4 sections that cover prenatal care (PNC), healthy eating habits, physical activity, orientation of labor and delivery, breastfeeding, newborn care, family planning, among others. For FY 2008-2009, 88 sessions of these courses reached 1,455 participants.

During 2008, the MCH Program continued collaborating with the Puerto Rico Chapter of MOD Prematurity Taskforce (PRPT). Data from 1990 to 2004 was analyzed with the objective of identifying major prematurity risk factors that could explain our very high prematurity rate. Results were presented in the Surgeon General's Conference on the Prevention of Preterm Birth in Bethesda, Maryland and in the 2008 Pediatric Societies Annual Meeting in Hawaii.

The MCH Program developed the Prenatal Care Card (PNC Card) to ensure that the pregnant women have with them at all times information regarding their prenatal care and will be able to provide this information to ER providers during an obstetric emergency. The PNC Card was submitted to the Health Insurance Administration of Puerto Rico (ASES) to be distributed to all the insurance companies that offer services to GIP participants with the objective of standardizing this information among this population.

The MCH Community Health Workers (CHWs) distributed educational material and offered 158 group activities on the subject of signs and symptoms of premature labor to 2,016 participants across the Island during FY 2008-2009. Likewise, orientations regarding where to seek emergency assistance in case premature labor ensues were offered during these activities.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Educate pregnant women on the risk of preterm delivery and where to go in case of an emergency.			X	
2. Disseminate educational materials explaining signs and symptoms of PTB.			X	
3. Collaborate with the PR March of Dimes Prematurity Taskforce.				X
4. Promote the use of a prenatal care card with pertinent information to be carried at all times by pregnant women.				X
5. Carry out a study to classify hospital facilities by levels of perinatal care, according to the adapted Perinatal Care Guidelines (5th edition).				X
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Since 2009 VS is not completely available, a percent change was calculated between 2007 and 2008 to obtain the percent of VLBW infants born at facilities for high-risk deliveries and neonates. According to this, there has been a 2.8% decrease, therefore for 2009 it is expected that 50.8% VLBW infants were born in these facilities, based on the PCGRC guidelines.

One possible explanation for this decrease is the lack of a formal classification of these perinatal facilities and the constant change in the services they provide to newborns. Many VLBW may be occurring in facilities that are prepared for high-risk deliveries but they are not identified as such.

During 2009, the PRPT had the opportunity at the Caribe Gyn Conference (August 2009) to address health providers, particularly obstetricians, about premature births in Puerto Rico. Also a massive TV, radio, newspaper and billboards campaign emphasizing the importance of the last weeks of gestation for the maturity of a fetus was launched at the Prematurity Awareness and Prevention Day during November 2009. As part of the PR MOD PRPT, the MCH Program will collaborate in this year's objective of decreasing late preterm births. New approaches for decreasing this rate, such as the administration of the hormone "17 P", are being evaluated.

HVNs and CHWs continue to educate pregnant women on the signs and symptoms of preterm delivery and providing them with information regarding the Level III facilities closest to them.

c. Plan for the Coming Year

The reclassification of birthing hospitals according to the PCGRC guidelines will be repeated every other year with the objective of maintaining updated information of the perinatal care of these hospitals.

Considering PCGRC guidelines for the classification of birthing hospitals in Puerto Rico, the MCH Program will perform a descriptive analysis to identify newborns outcome depending on their place of birth. The findings of this study will be shared with perinatal providers and executive directors of birthing facilities across the Island. We expect birthing hospitals will be able to coordinate among themselves and establish a regional referral network based on their assigned level of care. This will allow them to provide services in the appropriate facilities to pregnant women, based on their level of risk for a poor pregnancy outcome.

MOD will continue its aggressive prematurity awareness campaign in the media. Therefore, the MCH Program will continue to participate in the PRPT organized with the objective of identifying specific causes that might explain the increase in premature births.

The MCH staff and HVNs will continue to educate pregnant women to recognize the early signs and symptoms of premature delivery. In addition, we will stress the importance of knowing where the closest Level III facilities are located so they will know where to go for an obstetrical evaluation in case premature labor signs and symptoms appear. In addition, educational materials and information concerning signs and symptoms of premature labor will be disseminated to pregnant women.

The new Prenatal Courses will continue on a regular basis. The signs and symptoms of a premature labor will be addressed during the sessions.

Performance Measure 18: *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	86	87	88	89	90
Annual Indicator	71.6	82.0	82.0	82.7	84.1
Numerator	36285	39199	37292	36757	37092
Denominator	50687	47806	45490	44441	44080
Data Source				Birth Certificate OITA	Birth Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	85.6	87.1	88.7	90.2	91.7

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: Data for the analyses were provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Because Vital Statistics (VS) data were not available, estimated data were obtained through trend analyses using the last 9 years (2000-2008) and linear curve estimation regression models. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

In 2008, 2.7% (936) of the women who delivered did not answer the question and were regarded as missing values for this field in the birth certificate. The reported number reflects the proportion of women who provided an answer for the question.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

Routine prenatal care (PNC) is an excellent approach to detect potential problems, prevent them if possible, and promote the well being of pregnant women, their offspring and ultimately their families. Since early PNC is one of the most cost effective strategies used in public health, the MCH Division continually promotes it at all levels in PR.

According to preliminary Vital Statistics (VS) data for 2008 in PR, 94.1% of mothers with a live birth received PNC. Participants of the Government Insurance Plan (GIP) constituted 67.2% while 31.4% were under private insurance and 0.1% had no health plan. However, only 82.7% live births occurred to women who entered PNC in the first trimester in spite of having a health plan.

The 2008 ESMIPR (Spanish acronym for the PRAMS-like study carried out by the PR MCH Division) reported that 89.7% of pp women who participated in the survey began PNC in the first trimester; 8.05% did so during the 2nd and 3rd trimester, and 0.4% had no PNC. Also, 95.9% of them were non-Medicaid participants while 89.8% were Medicaid participants.

The 2008 VS data showed that women 20 years or older had higher rates of early PNC initiation (82.8%) when compared to those in the 10-19 year-old range (69.8%). A disparity is still present despite a protocol was developed to help adolescents suspecting being pregnant get the blood test and obtain the GIP card if result was positive. This low rate of PNC among adolescents is continually being addressed by MCH staff located at the regions in an effort to increase their enrollment in PNC services as soon as possible. Adolescents are targeted for guidance and support until they initiate PNC by an obstetrician, then are visited regularly by HVNs and monitored to verify compliance with the PNC Guidelines established by the PRDOH.

The current Civil Code, which increased to 16 the age for consenting sex, also presents a problem for early entry into PNC as adolescents may decline the service to avoid being reported to the authorities.

Since preconception health is considered an essential factor in the pregnancy outcomes of women of childbearing age, the MCH Division summoned key collaborators, such as WIC, HIC, PRDOH Diabetes Program, Academia and Healthy Start Program, among others to create a Preconception Health Promotion Committee. A pilot project to target pp women with diabetes was proposed as its first task to increase their awareness of the importance of controlling their

diabetic condition during the preconception period to improve future pregnancy outcomes. Four educational modules on diabetes control, nutrition, physical activity and women's health were developed to be implemented in two WIC clinics at the Island's west area during the fall of 2009. WIC Program nutritionists were key collaborators in this initiative; nevertheless, the project's implementation was delayed due to administrative reorganization within this Program.

We continue our efforts to promote early entry into PNC, particularly identifying pregnant women with no PNC and assisting them in the enrolling process into obstetrics and HVP care. During FY 2008-2009, CHWs across the Island collaborated in this task as well as provided 385 group educational activities on the subject, reaching 5,508 persons.

HVNs provided individual orientations on the early signs and symptoms of pregnancy and the importance of early PNC to interconceptional women at home visiting interventions. Also, preconception health was promoted by CHWs through 167 educational events where 1,837 persons took part.

The Office on Women's Health funded two training activities on the Heart Truth curriculum, where 88 PCP's and RN participated. Participants were encouraged to educate women about heart disease, assess their risk, the importance of early PNC, and to motivate them to take preventive actions.

The study carried out by the SSDI Program to evaluate the effect of the 2005 birth certificate review on some VS parameters, including PNC, was concluded. Analyzed data was not definite for any parameter; more years of experience are needed with this instrument to judge if results are real or reflection of changes in the gathering data process.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Endorse the provision of health insurance coverage that includes free early and adequate prenatal care for all pregnant women with incomes 200% below the State Poverty Level.		X		
2. Keep on offering educational events at community level as a means to identify women with no prenatal care and to help them receive PNC services.		X		
3. Continue promoting preconception care and early PNC enrollment among participants of the Home Visiting Program and their families during HVN interventions and at the community setting.			X	
4. Share results obtained from studies performed by MCH staff with key collaborators to increase their knowledge about the importance of promoting early prenatal care.				X
5. Develop a preconception health pilot project aimed at postpartum women with diabetes to increase their awareness of the importance of controlling their health condition to obtain better future pregnancy outcomes.			X	
6. Provide training activities aimed at health professionals to increase their awareness of the importance of educating women of reproductive age on the need of receiving early and adequate PNC.				X
7. Convene the Committee for Promotion of Preconception Health at least 4 times during the year.				X
8.				

9.				
10.				

b. Current Activities

According to data obtained from an estimate using regressions for trend analyses based on the years 2000-2008, MCH Division staff found for year 2009 a 1.7% reduction in the percent of infants born to pregnant women receiving PNC in the first trimester (84.1%) when compared with the previous year's rate (82.7%). The most important reduction was observed in the GIP group (a 3.5% change) than in the non-GIP group (0.6%). Also, the difference between GIP and non-GIP groups is statistically significant in 2009. The non-GIP group was the only one to exceed the PR Healthy People 2010 goal of 86% (88.8%).

Our efforts have continued to promote early enrollment into PNC services. MCH CHWs and HVNs use outreach activities regarding the importance of seeking PNC early in pregnancy as a strategy to detect women who lack PNC and to help them be enrolled into these health services ASAP. Women in their interconceptional period participating of the HVP continue benefiting from individual educational orientations by HVNs on the early signs and symptoms of pregnancy and the need for early PNC. A total of 5,342 interconceptional participants were reached during 2009.

The modules for the pilot project aimed at women of reproductive age with diabetes, especially interconceptional women, were reviewed and are ready to use. Conversations with key collaborators, particularly WIC program, are in progress to reach an agreement to begin the project, hopefully during this fall or in the spring of 2011.

c. Plan for the Coming Year

Special attention will continue being given to detect and help in PNC enrolling process pregnant women who lack prenatal care, particularly adolescents.

MCH staff will provide educational activities at community level across the Island on the importance for a pregnant woman to receive early PNC to increase public awareness on this health issue. Early signs and symptoms of pregnancy and the need to seek care as soon as pregnancy is suspected will be particularly highlighted.

After the preconception pilot project is finally implemented and concluded, a full evaluation will follow to make modifications as needed. We expect to expand it to other communities in the island.

The MCH Division will continue disseminating results of the studies carried out by its staff among prenatal health care providers and significant stakeholders to enhance their awareness on their responsibility of educating their clients on all issues regarding early signs and symptoms of pregnancy and early admission to PNC services. Particular emphasis will be made regarding compliance with the current public policy that requires the admission of a pregnant woman into PNC as soon as the service is requested.

D. State Performance Measures

State Performance Measure 1: *The number of HIV positive pregnant women treated with AZT.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	100	100	100	100	100
Annual Indicator	93.2	94.0	98.7	100.0	100.0
Numerator	69	78	76	56	61
Denominator	74	83	77	56	61
Data Source				Pediatric HIV AIDS program	Pediatric HIV AIDS program
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	100	100	100	100	

Notes - 2009

Data provided by the Pediatric HIV/AIDS Program of the PR Department of Health.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The availability and provision of adequate services to HIV positive pregnant women in the Island have always been a main concern of the PRDOH. Proof of this is the implementation of a public policy in 1994 to offer HIV positive pregnant women in the Island voluntary treatment with AZT to prevent perinatal HIV transmission. Health care providers offering services through the health care insurance companies contracted by the Government Insurance Plan are currently required to comply with Perinatal HIV Treatment and Prevention Guidelines implemented since that time. Treatment implemented through the public policy eventually expanded and at present offers other therapy options besides AZT to ensure adequate treatment. The current guidelines include these options.

Following the success in reducing vertical transmission of perinatal HIV through a pilot project implemented in a hospital at the North area, in February 2008 the Secretary of Health signed a public policy. This regulation requires that all health institutions in PR provide rapid HIV testing in delivery rooms to women with no evidence of HIV status in the first and third trimester of pregnancy. Women with HIV positive results must be offered treatment and neonates whose mothers could not be screened are to be examined with rapid HIV test.

The Perinatal HIV/AIDS Prevention Program (PHAPP) of the PRDOH has continued stressing the importance of complying with the public policy regarding rapid HIV testing. To achieve this, it regularly assists major birthing hospitals in PR to execute the rapid HIV testing policy. During CY 2008, a total of 1,398 women were screened with this test at hospital delivery rooms across the Island. Two of these had HIV positive results and were referred for treatment.

Educational efforts at community level about perinatal HIV/AIDS prevention continue across the island by the MCH staff and the PHAPP. In 2008, one-on-one orientations and group activities on the subject were provided by HVNs to 6,553 prenatal and interconceptional women participants of the Home Visiting Program. CHWs reached 736 persons during 40 educational events on the subject at community level. Also, the PHAPP reached 99 persons among them providers from health institutions and community at large during 8 educational events on Perinatal HIV/AIDS prevention. A total of 327 health providers attended training sessions on the subject at 3 hospitals

and at a local hotel.

To assure that perinatal care guidelines are followed as required, a patient prenatal information card was prepared and presented to ASES for approval to be used by all health providers under contract by the Health Care Reform. This card will contain important health information about the pregnant patient, including her HIV status, and must be kept up to date by the health care provider. The patient is supposed to have the card with her at all times.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue raising awareness among HPV participants, especially pregnant women, on the importance of being screened for HIV and receive treatment if needed, by providing educational activities and reading material on the subject.			X	
2. Continue providing pre-counseling and screening for HIV to pregnant women and treatment to those with a positive HIV result if patient consents.	X			
3. Continue providing assistance to hospital facilities to comply with the public policy that requires all birthing institutions perform the rapid HIV test to women in their labor rooms with unknown HIV status.				X
4. Keep key health providers informed of results of data about perinatal HIV screening and treatment.				X
5. Provide educational material related to prevention of perinatal HIV transmission at community settings across the Island.			X	
6. Continue joining forces with the Perinatal HIV/AIDS Prevention Program in their efforts to make health care providers comply with perinatal health care guidelines, which require that all women must be screened for HIV during PNC.				X
7. Persist in promoting the use of the patient prenatal information card as a means of guaranteeing that all pregnant women are screened according to the current perinatal care guidelines, particularly HIV testing.			X	
8.				
9.				
10.				

b. Current Activities

During 2009, the HVNs of the MCH Program continued providing educational group activities and individual orientations on the subject of preventing perinatal HIV/AIDS transmission. A total of 6,890 prenatal and interconceptional women participants of the HV Program were reached. Likewise, CHWs have been engaged in bringing the topic at community level to interested persons during educational events across the Island.

In CY 2009, the Perinatal HIV/AIDS Prevention Program reported that there were 63 HIV positive pregnant women; 61 received antiretroviral treatment. Of these, so far 50 have had a live birth, one a stillbirth and 2 aborted. No infant with HIV positive results has been notified until now.

A major health care insurance company in the Island solicited a model of the patient prenatal card prepared at the MCH Division to include it as a requirement of the prenatal care services they provide.

c. Plan for the Coming Year

To reduce the occurrence of perinatal transmission of HIV/AIDS it is crucial to identify HIV positive pregnant women and treat them accordingly with antiretroviral medications, including AZT. Toward accomplishing this goal, the MCH Division will continue emphasizing the importance of preventing perinatal HIV transmission via educational activities as well as distribution of educational material on the subject. The MCH Home Visiting Program will take special care in referring those women participants of the program with HIV positive results for case management and care services at Immunology Clinics located across the Island.

Collaboration will continue between the Perinatal HIV/AIDS Prevention Program and the MCH Division to provide educational activities on the subject that are included in the prenatal curriculum being offered to HVP participants and relatives. Those pregnant participants who do not know their HIV status will be oriented and encouraged to have a rapid HIV test and referred for treatment if needed and accepted.

Health care providers and institutions are key part in all efforts aimed at reducing the transmission of perinatal HIV. To raise awareness of their responsibility in this task, the MCH Division will continue collaborating with the Perinatal HIV/AIDS Prevention Program in disseminating the information pertinent to the public policy and to current perinatal guidelines of the PRDOH, particularly by educational events to earn CME credits. The PR College of Physicians, the PR Chapters of ACOG and AAP, and HIC will be continually addressed to help keep their members updated on these important issues. Those interested persons will also have access to statistical data regarding perinatal HIV/AIDS transmission in the Island.

The Perinatal HIV/AIDS Prevention Program and the MCH Division will continue enforcing compliance with established perinatal health care guidelines regarding HIV screening by health care providers in the Island. The collaboration of the administrative section of the PR Health Care Reform will be pivotal in this effort. This will provide the needed information to identify barriers, outline strategies to increase the number of pregnant women screened for HIV and provide adequate treatment and follow up to those with HIV positive results.

We will also continue promoting the use of the patient prenatal information card by all pregnant women to enforce the compliance with the established perinatal health care guidelines, in this respect those regarding HIV screening.

Consistent improvement in the prevention of perinatal HIV/AIDS transmission has been observed in the past 5 years.

This SPM will be deactivated and the parameter will be addressed through Priority #1: Improve WRA health at the time of conception. We will continue with our current activities and collaborative efforts to assure that improvement persists.

State Performance Measure 2: *Establish a Home Visiting program in at least 90% of the Island by the year 2,010.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	95	95	95	95	95
Annual Indicator	94.9	93.6	89.7	93.6	88.5
Numerator	74	73	70	73	69

Denominator	78	78	78	78	78
Data Source				Home Visiting Program	Home Visiting Program
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	95	95	95	95	

Notes - 2009

Reported data as of December 2009, MCH Program of the PR Department of Health.

Notes - 2008

For source of information refer to 2006 notes.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The core service program of the Puerto Rico Title V program is the Home Visiting Program. Its target population consists of pregnant women, interconceptional participants (up to 24 months after birth) and children up to age 2 with complex health and social problems.

We continue to have a decrease in the numbers of HVNs due to retirement, extended sick leave, layoff because of the implementation of Law #7 of March 2009 and transfers to other positions or resignations. We will consider recruiting personnel to fill existing vacancies as budget, administrative considerations and other factors allow.

Through the HVP interventions, emphasis is given to increasing the use of preventive services, early admission to prenatal care, regular pediatric and women's health visits to primary providers, and adequate immunizations; screening for behavioral risk factors and maternal depression; managing women who are at risk through educational interventions or referrals to treatment services available in the community; and promoting an interconceptional period of at least 24 months after birth.

In 2009, 6,510 families received home visiting services. CHWs continued carrying out outreach activities to identify pregnant women and children not connected to the health care system and refer them to the HVP or to services available in the community, according to their needs and the capacity of the local HVN to admit new cases. They identified pregnant women and children in the community who were not connected with the existing system of care who were given the necessary referrals to prenatal care, WIC and other services. Some were admitted to the HVP, according to their need, risk factors and the caseload of the HVN. If not admitted, the CHW's intervention ensured that the woman or child would receive needed medical, social and other support services. The CHWs maintain an extensive directory of community resources, which they share with the HVNs to facilitate the referral and care coordination efforts.

In addition, in FY 2008-09 the HVNs and CHWs reached 71,199 persons in the community through 5,239 group orientations on topics related to maternal and child health.

HVNs and CHWs assisted HVP participants in organizing Participants' Committees (PCs) at the local (municipal) level. There are 23 committees. These groups are composed of HVP participants, their partners or other support persons and community representatives who are interested in the health and well being of the maternal and child population. The purpose of these committees is to empower participants to solve their common problems and needs with the collaboration of public and private agencies and organizations. Each PC met regularly to establish a work plan to look for solutions to the situations they identified as priorities.

The Rotary Club of Puerto Rico adopted Infant Mortality as a focus area for its community

activities in 2008-09. Two representatives joined the PR Healthy Start Consortium in 2007. The Rotary Club has sponsored educational activities directed at our participants and the community. The most significant contribution has been the use of their meeting facilities free of charge, which substantially lowered the cost of providing continuing education to our staff.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue offering home visiting services for at-risk pregnant and parenting women.		X		
2. Offer continuing education activities for HVNs and CHWs to enhance their professional capacity.				X
3. Fully implement the case assignment system for HVNs to reflect the risk level of participants.				X
4. Continue HVP data collection, analysis and evaluation activities.				X
5. Reinforce HVP Participants' Committees.				X
6. Collaborate with the Department of the Family in the continued implementation of a Home Visiting Program.				X
7.				
8.				
9.				
10.				

b. Current Activities

By the end of 2009, 76 Home Visiting Nurses (HVNs) were providing services in 69 municipalities (88.5% coverage). To compare, by April 2009 we had 94 HVNs in 73 municipalities (93.6%), including both Title V and ADFAN nurses. The Department of the Family's Administration for Children and Families (ADFAN) has the "Nidos Seguros" HVP to complement the services provided by Title V. They have 8 HVNs who cover a total of 20 municipalities (these are included in the numbers above). In addition, 47 Community Health Workers (CHWs) provide outreach and education services in 43 municipalities (55.1%).

HVNs and CHWs received in-service training regarding: Promoting mental health in the family; Infant and child development; Dental health; Care of the premature infant at home.

In 2009, the FIMR project had 6 meetings and reviewed 11 cases. The findings will be submitted to the Mayaguez Regional Board in order to develop a strategic action plan to address these findings.

c. Plan for the Coming Year

Depending on the availability of qualified candidates and funding level, vacant HVP positions may be filled. Priority will be given to those municipalities with no HVN. The collaboration with ADFAN will continue, ensuring a wider availability of support services for the population that Title V cannot serve.

The HVP will continue to provide services as described. Participants will be stratified according to risk level (Low, Moderate, Severe) depending on how many and what type of risk factors they present. The caseload of each HVN will range from 50-70 families, depending on the risk level of each. Community Health Workers will continue to carry out outreach activities to identify pregnant women and children who are not connected to the health care system, as described previously. In

addition, they will take part in the HVP as described previously.

The collaboration between Title V and the PR Healthy Start Project (PRHSP) continues to be an asset. We will maintain our efforts to identify factors associated with the higher IM in the South/Southwest areas of the Island and continue to implement strategies to improve MCH indicators in this area. The current Healthy Start Project period ends on January 31, 2015. The Healthy Start grant monies are used to support the efforts of the Home Visiting Program, particularly in the areas of staff training, educational materials, Consortium development and data collection, analysis and evaluation.

Ongoing assessment of the staff's educational needs will allow us to continue offering in-service training that is responsive to the needs and interests of the staff. This assures a high quality of services offered to our population. HVNs and CHWs will receive continuing education on timely MCH topics.

In addition, our HVNs and CHWs will continue to support the development of the PCs. Each PC will meet on average 6-10 times per year and establish a work plan to look for solutions to the situations they identify as group priorities. The meetings also feature educational activities on various MCH topics. Some PCs may sponsor or participate in community level health fairs and immunization clinics held by the PRDOH Immunization Program.

This PM will be deactivated. The way this PM is designed does not allow us to determine if the HVP is really effective. There may be HVNs in all municipalities but this does not mean that the program is achieving its goal of reaching the population in need. Nevertheless, we will continue our efforts to expand the HVP services to all municipalities in the Island as possible and monitor its rendering of services.

State Performance Measure 3: *Prevalence of tobacco use among pregnant women*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	1.5	1.5	1.5	1.5	1.5
Annual Indicator	3.6	2.7	2.0	2.0	2.1
Numerator	36	52	38	38	40
Denominator	1004	1904	1876	1876	1884
Data Source				ESMIPR	ESMIPR
Is the Data Provisional or Final?				Final	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	1.5	1.5	1.5	1.5	

Notes - 2009

Preliminary data provided by the 2010 ESMIPR (PRAMS like survey) from the MCH Program of the Department of Health.

Notes - 2008

Updated data for 2007. Data collected through the ESMIPR Survey conducted in 2008, MCH Division of the Puerto Rico Department of Health.

Notes - 2007

Data collected through the PRAMS like survey conducted in 2008, MCH Division of the Puerto Rico Department of Health.

a. Last Year's Accomplishments

The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out every two years by the MCH Division. Since the 2002 survey, an average of 1,773 is interviewed every year. In the 2008 survey, 1,876 women were interviewed in the immediate post partum period.

For 2008, preliminary birth certificate data show 0.02% of new mothers report using tobacco in the 3 months before pregnancy, 0.02% do so in the first trimesters and 0.01% do so during the second and third trimester. In contrast, the 2008 BRFSS revealed that 8% of all women smoked every day or some days (pregnancy status was not ascertained).

The Home Visiting Nurses (HVN) continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2008-09, a total of 163 educational activities on ETS and smoking prevention were carried out, reaching 2,408 participants.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Share information of the ESMIPR survey with concerned individuals.				X
2. Screen HVP participants for tobacco use and provide management according to the level of risk.	X			
3. Update providers' knowledge regarding screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	
5. Disseminate educational materials on adverse effects of high risk behaviors during pregnancy.			X	
6. Increase public awareness of poor birth outcomes associated with risky behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

b. Current Activities

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in educational

activities for pregnant women. As of 2009, we no longer use the MOD "Comenzando Bien" prenatal curriculum; instead, we developed a local version that is more pertinent to our participants in both content and format. In 2009, the "No Smoking Day" march in Arecibo had over 300 participants, among general public, pregnant women and children.

In 2009, 67 of those pregnant HVP participants screened reported smoking during pregnancy. Of these, 65 (97.1%) stopped smoking or significantly reduced their tobacco use, and 2 (2.9%) continued smoking at the same rate.

ADFAN of the PR DOF continues to implement its HVP. Their HVNs implement the tobacco use screen and the Smoking Cessation guide, as trained by the HS staff.

The 2010 ESMIPR reported 2.0% (14) of 909 respondents smoked at some point during pregnancy and 1% (11) continued to do so in the last trimester.

During 2009, trained abstractors collected information from medical records to evaluate the 2005 revised Birth Certificate data availability and accuracy. The concordance measures for tobacco and alcohol use could not be measured because there was not enough information to perform this analysis. Several more years of experience with the new birth certificate are needed to judge if this is real and not only due to changes in the data gathering process.

c. Plan for the Coming Year

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse.

CHWs will also continue to include the topics of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses and other educational activities.

This SPM will be deactivated as the parameter may be measured with data gathered for NPM 15: Percentage of women who smoke in the last three months of pregnancy.

State Performance Measure 4: *The birth rate among girls 10-14 years of age*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	1.1	1	1	1	1
Annual Indicator	1.4	1.2	1.1	1.0	0.9
Numerator	206	170	164	147	131
Denominator	148457	147621	146465	144518	142879
Data Source				Birth Certificate OITA	Birth Certificate OITA
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	1	1	1	1	

Notes - 2009

Updated data for 2007 and 2008.

Because Vital Statistics (VS) data was not available for 2009, an estimated data was obtained through trend analysis using the last 9 years (2000-2008) and a linear curve estimation regression model. For the methodology used, refer to the Appendix 5.

Numerator: Data for the analysis was provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population Estimates provide by the US Census.

Notes - 2008

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

The birth rate of the age group 10-14 in PR continued its tendency to decrease from 1.1 per 1,000 in 2007 to 1.0 in 2008. This birth rate has had a statistically significant decrease of 58.3% during the past 10 years, from 2.4 per 1,000 in 1997 to 1.0 per 1,000 in 2008. The Comprehensive Adolescent Health Program (CAHP) of the MCAH Division continued using the Positive Youth Development (PYD) as its main strategy to promote youth health and prevent high risk behaviors such as premature and unprotected sex which can lead to teen pregnancy. MCAH personnel offered 4,012 activities with 79,524 participants including: TPP, sexuality education, self esteem, sexual development and other related themes.

The MCAH HV nurses held 167 visits to new 10-14 year old pregnant participants and 593 as follow ups. Interconceptional care visits (post partum until baby is 24 months old) were made to 42 new 10-14 year olds and 457 follow up visits as part of services that include spacing future births.

The culturally competent "Reto y Esperanza" PYD Action Guide for PR Adults was piloted and assessed. The PYD community pilot project in rural municipality of Naranjito continued with the participation of 224 youths and 58 adults in three school settings including workshops to promote PYD in communities.

The CAHP's Youth Health Promoters Project (YHPP) continued in 37 public middle schools in PR. A total of 622 YHP ages 12 to 15 (7th to 9th grade) held 155 activities attended by 12,275 participants (11,344 peers and 931 adults) during the school year. Activities focused on health promotion and high risk behaviors' prevention messages to peers, family and community including avoidance of early, unprotected sexual relationships that may lead to teen pregnancies and other consequences. A total of 325 YHP graduated in 9th grade after three years participating in the YHPP.

The YHPP in Juvenile Justice Demonstration Project continued in Girl's Juvenile Detention Center in Ponce. Boy's Project temporary ceased due to relocalization Twelve (12) females participated in twenty (20) workshops and meetings. As part of PYD TPP activity a video on self esteem was produced and discussed with their peers at the final year's activity with two presentations on sexual and reproductive health.

The Secretary of Health acknowledged the decrease in Puerto Rican teen birth rates in the past ten years and dedicated March 2009 Teen Pregnancy Prevention Month (TPP) to the MCH CAHP youth health promoters' work towards TPP in 38 groups island wide. A representation of 29 YHP and 43 adults participated in the activity that included March 2009 Proclamation and a listening session "Jóvenes concienian sobre el embarazo en la adolescencia" with eight (8) YHP delegates from three school settings guided by an adult moderator. YHP shared their insights on teen pregnancy, its prevention and their work to raise awareness on its impact to teens and family. Also in March 2009, 132 activities held by YHP and CAHP Regional Coordinators reached 6,682 students and 635 adults, and MCAH personnel held 259 activities to 5,790 participants. TPP and PYD were discussed in two sessions of "Hablando de Filantropía", a local radio station (11Q-AM) interview program that reaches the whole island. Three PR and one USA newspapers published articles about the decrease of teen births rates in PR.

Besides activities in March, CAHP Regional Coordinators held 370 educational activities about adolescence health promotion and risk prevention including TPP to 10,036 students and 2,626 adults island wide. CAHP Central Staff offered four presentations on the impact of teen pregnancies to 100 PRDOE nurses and 300 health professionals.

"Plain Talk/Hablando Claro" (2005-2008) Project in Naranjito PR completed its 2nd community map survey of 223 youths and adults in September 2008. This collaborative effort with Naranjito Teen Program (NTP) and MCAH received an encouraging positive Annie Casey Foundation final evaluation in March 2009.

The Puerto Rico Abstinence Education Program PRAEP reached 10,527 participants including students, parents, teachers and others in 142 activities. A mass media campaign targeting parents on talking about abstinence with their kids was held in TV and Theaters. Interactive workshops for parents and teens on sexuality communication were distributed in CD format. The PRAEP ceased activities on June 2009 due to federal administration closing of all abstinence education funds.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Disseminate Positive Youth Development (PYD) Model in PR using the Action Guide and Train the Trainer developed by "Reto y Esperanza" Project.			X	
2. Support the PYD community pilot program in Naranjito to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue the CAHP's Youth Health Promoters Project (YHPP) in public middle schools.			X	
5. Continue the CAHP's Youth Health Promoters Demonstration Project (YHPDP) in two juvenile Institutions (one male, one female).			X	
6. Facilitate the development of culturally appropriate educational materials and PYD activities to promote healthy behaviors and prevent teen pregnancies.			X	
7. Increase awareness on issues related to teen pregnancies among health professionals and the general public including parents and communities.			X	

8. Support Plain Talk/Hablando Claro Project final evaluation presentation to the community to encourage follow up of activities aimed at enhancing parent-child and adult-youth effective communication about sexuality to prevent teen pregnancies.			X	
9.				
10.				

b. Current Activities

The implementation of PYD model as a teen pregnancy prevention strategy continues. PYD Action Guide adult modules continue in revision.

Youth Health Promoters Project (YHPP) continues in public middle schools. The demonstrative YHPP in Juvenile Justice continues in the girl's facility and was restarted in Bayamón male juvenile institution. The PRDOH applied for Tier 2 Teen Pregnancy Prevention Funds to refine, test and duplicate the YHPP as an evidenced based culturally competent innovative strategy in middle schools and juvenile institutions in PR.

The report of the study "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in Bayamón Health Region" was completed, and presented to youths, health professionals and the general public as part of Proclamation of March Teen Pregnancy Prevention Month by the PR Secretary of Health. This qualitative study analysis presented new paradigms to work with youths about teen pregnancy and motherhood in PR. Island wide activities also were held in March.

Plain Talk/"Hablando Claro" Project final evaluation was used to prepare a presentation and brochure to be given to the community.

CAHP Associate Director was selected as AMCHP Scholar on Adolescent Reproductive and Sexual Health Disparities. A work committee was created to address ARSH disparities in PR that include experts in: mental health, STD/HIV, qualitative teen studies, pregnant and parenting teen programs, family planning and youths.

c. Plan for the Coming Year

MCH CAHP will continue to address the impact of teen pregnancies and its prevention using PYD strategies. Naranjito Teen Program will continue its collaboration on PYD in communities. PYD Action Guide Youth Modules will be pilot tested and assessed with the collaboration of youths in an alternative school setting. The revised Adult PYD Guide will be offered to the Adolescent Regional Coordinators to become trainers of the intervention as PYD Promoters.

CAHP Program's YHPP will continue its implementation by the Adolescent Regional Coordinators in public middle schools with the support of the PRDOE. The curriculum guide "Jóvenes Saludables en Acción" and the Implementation guide will be completed. The YHPP demonstration project will continue in two juvenile justice institutions, 1 female and 1 male. Upon approval of PRDOH application for Tier 2 TPP funds to evidence YHPP in PR the Action Plan for its implementation will be started with MCAH support.

CAHP collaboration with programs that provide services and support for pregnant and parenting teens will continue. MCH HVNs will continue offering interconceptional services to adolescent participants to promote they space their future pregnancies.

The presentation prepared by "Hablando Claro" Project 2005-2008 will be shared with the Naranjito's La Sabana community residents, stakeholders and professionals that contributed to the initiative. Project's next steps will be considered.

CAHP and the Committee to address ARSH disparities in PR will meet to develop specific action plans. The qualitative studies by MCAH and other professionals will be used to provide insight on teen views and to help the group develop culturally appropriate strategies on sexual and reproductive health among PR youths. Plans may include development of public policy or specific strategies on themes including youth of variant sexual orientation, pregnant teens, adolescent sexual and reproductive rights and services among others.

MCH Division will continue gathering information from VS to update trends in teen birth rates by age groups for each municipality. This information will be used by CAHP in educational presentations and collaborative efforts with different government agencies and in each PRDOH region or municipalities to address teen pregnancy prevention's specific initiatives. Data will also be shared with interested students and professionals. CAHP will participate in collaborative efforts with mental health ASSMCA "Consulta Juvenil" survey and the PRDOE YRBSS to review and propose additional survey questions on PYD and health.

CAHP will continue educating parents, teachers and general public on the importance of connectedness with teens in family, school and community environments in order to protect them from engaging in high risk behaviors.

SPM 4 will be deactivated as it will be monitored through Priority 7: Promote healthy lifestyles in adolescents. This priority includes the reduction of risk conducts in this population.

State Performance Measure 5: *The rate of cesarean section in Puerto Rico*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	38.2	36	34.8	32.6	30.4
Annual Indicator	48.1	48.3	49.2	48.5	50.1
Numerator	24390	23563	23017	22136	22106
Denominator	50687	48740	46736	45675	44080
Data Source				Birth Certificate OITA	Birth Certificate OITA
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	28.2	26	23.8	21.6	

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: Data for the analyses were provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Because Vital Statistics (VS) data was not available for 2009, estimated data were obtained through trend analyses using the last 9 years (2000-2008) and logarithmic curve estimation regression models. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

For decades in Puerto Rico, the constant rise in cesarean section rates has worried the public health sector. Among those interested in the issue is the MCH Division of the PRDOH, who carried out several studies from 2000 to 2005 to explore contributing factors and to develop strategies that may help reduce this parameter in the Island. Results disclosed some interesting observations, such as: C/S deliveries occurred mainly during workdays and daytime hours; the highest rates were among women 20-34 years old and those with more than 12 years education; women with private health insurance had the higher C/S rates, followed by those covered by the Government Insurance Plan; indication to justify a C/S delivery was not documented in 77% of charts reviewed (a sample of records of live births by C/S); and a suggestion that physicians' attitudes and beliefs might be contributing to the delivery method selected. Unfortunately, none of these studies helped in identifying a causal factor to explain the high C/S rates in the Island.

Although a Committee for the Evaluation and Reduction of C/S in PR, which was established during the research phase of these studies to review the results, could not provide recommendations at the time to deal with the problem, at a later meeting in February 2008, it discussed two strategies that may prove successful. Both proposals dealt with the lack of available obstetricians to provide services for pregnant women in PR. One of these approaches encouraged establishing public policy to provide tax credits to hospital facilities that provided paid leave to nurses while they studied to become certified nurse midwives. This could help increase the number of licensed midwives available as well as provide additional help to obstetricians in their patients' routine prenatal, intrapartum, and postpartum care. Another strategy proposed the implementation of obstetrics hospitalist programs to help reduce the obstetricians' workload and to guarantee the presence of a qualified health professional at all times at the hospitals to provide care services for pregnant women particularly at labor rooms. The obstetricians in the community would be confident that their patients are under competent hands until they arrive to take care of them. Both ideas were presented to a legislator who was interested in the issue, but a bill was not proposed at the time.

Nevertheless, in August 2008 the Governor in turn issued an Executive Order to establish a commission to address the rising tendency in C/S deliveries in PR. This was followed by an Administrative Order by the Secretary of Health in December 2008 to establish public policy to reduce the trend of unnecessary C/S procedures in the Island and to promote vaginal delivery. It requires orientation on the subject to pregnant women as well as a document by their health provider certifying this orientation to be handed over when admitted to labor room. Several obstetricians, including the former MCH Director and the MCH Obstetrics Consultant, participated in the preparation of the document.

In November 2008, the Puerto Rico Academy of Medical Directors invited health care professionals to participate in an educational activity dealing with maternal and health issues. The current situation of C/S deliveries in Puerto Rico was included as part of a presentation on the epidemiology, factors and causes of infant mortality.

MCH Division considers a priority educating the community at all levels on the issue of the troubling increase in unnecessary deliveries by C/S in PR. During 2008, HVN reached all 6,527 HVP participants through individual interventions and educational activities regarding the indications for and the risks of delivering by C/S. Likewise, CHWs provided educational events on the subject at community level across the Island, reaching 396 persons. Eight perinatal nurses in site at hospitals across the Island provided information to pregnant women they came in contact with on the benefits and risks of both cesarean and vaginal deliveries.

During Cesarean Awareness Month in April 2009, PROMANI (Spanish acronym for a non-governmental non-profit organization) provided educational information on avoiding unnecessary

C/S procedures through their website to raise awareness on this issue at community level.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue using vital records information to monitor the tendency in C/S rates in Puerto Rico.				X
2. Provide educational activities to women of childbearing age on the indications and complications regarding a C/S delivery to increase their awareness on the issue and to empower them to prevent unnecessary cesarean procedures.			X	
3. Continue offering individual orientations and group educational activities by HVN to participants of the program about important aspects regarding a cesarean delivery.			X	
4. Collaborate in developing a public policy meant to reduce C/S procedures that requires pregnant women be oriented on the birth process and delivery options and have a certification by their health provider to be handed over at labor room.				X
5. Convene the PRDOH Committee for the Evaluation and Reduction of C/S in PR to discuss new proposals to reduce the C/S rates in Puerto Rico.				X
6.				
7.				
8.				
9.				
10.				

b. Current Activities

MCH Division continues to raise awareness at all levels on the indications and risks of delivering by C/S and the benefits of a vaginal delivery. HVNs provide individual interventions to HVP participants and group educational events on this subject. During 2009, all 6,890 women in the Program were reached. Health educators and CHWs, likewise, tackle this issue during educational activities at community level.

A legislative piece is in progress following the 2008 Executive Order issued by the former Governor, in this case considering the acceptance of midwife nurses as licensed practitioners to provide full obstetrics care, including vaginal delivery, to those women with no major complications. The MCH Division collaborated in the preparation of the PRDOH official position regarding this proposed public policy. Besides, legislation considers the PRDOH as the primal agency responsible for educating all the population on the different issues regarding C/S and vaginal deliveries. Major objections have continued arising from various groups, particularly physicians, as they consider, among other issues, that obstetricians are the experts in this area, while midwife nurses refuse to be under their supervision, and that legislation may provide a false sense of security as complications may arise without notice, even in women with low risk profile.

c. Plan for the Coming Year

The alarming rate of C/S deliveries in PR, particularly those unnecessary procedures, will continue being exposed by the MCH Division at all levels possible. To achieve this, we will encourage the development of public policy that deals with this problem, that is, without threatening interested parties while opening venues for collaboration between them. We will keep informed of all aspects regarding this and other bills that arise, particularly those that

propose innovative approaches.

Health care providers, particularly those responsible for maternal and child health services, and other key partners, will benefit from all the results of our investigations. This will keep them up to date on the issue and hopefully elicit their compromise in reducing the number of unnecessary C/S procedures in PR. We will encourage that continued education activities are provided where the subject of C/S indications and risks is included as a means of raising awareness on the problem among health providers and other interested parties.

We will continue using VS data to monitor C/S rates in the Island. The MCH Section for Monitoring, Evaluation, Investigation and Systems of Information will be responsible for this activity. We intend to notify on a yearly basis the administrators of health institutions their hospitals' individual C/S rates to bring about self evaluation. If requested, we will be available for assistance.

MCH staff will continue being engaged in educating all public sectors on important aspects about C/S deliveries, particularly women of childbearing age. Individual orientations and group activities will be provided for these purposes.

This SPM will be deactivated as major efforts to improve the C/S rates in PR are beyond the MCH capacity. Nevertheless, we will continue engaging our efforts in improving this health parameter in PR. We will monitor this health parameter through Priority #3: Decrease premature births, to assess the potential relationship between elective C/S and premature deliveries.

State Performance Measure 6: *Develop and maintain an active surveillance system for at least 55 birth defect diagnoses by 2010.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective		87	87	87	100
Annual Indicator	69.1	69.1	78.2	87.3	80.0
Numerator	38	38	43	48	44
Denominator	55	55	55	55	55
Data Source				Birth Defect Surveillance System	Birth Defect Surveillance System
Is the Data Provisional or Final?				Final	Final
	2010	2011	2012	2013	2014
Annual Performance Objective	100	100	100	100	

Notes - 2009

Data for 2009 provided by the Birth Defects Surveillance System of the PR Department of Health.

Notes - 2008

Data for 2008 provided by the Birth Defects Surveillance System of the Puerto Rico Department of Health.

Notes - 2007

The source of both the numerator and denominator is the BDSS.

a. Last Year's Accomplishments

All birth defects (BD) diagnoses included in the BDSS case definition were reviewed to examine the need for continued surveillance. In January 2009, five BD diagnoses were removed because of significant sub report. Conjoint twins and mitral valve prolapse (MVP) were eliminated because the BDSS was not able to do the case ascertainment for MVP before the age of six, and most mothers that are diagnosed with conjoint twins in PR, decide to give birth in the Continental US. Therefore, these cases were not meeting the case inclusion criteria. Other eliminated diagnoses were three ambiguous genitalia related diagnostic codes where case ascertainment was not possible due to lack of diagnostic information in the birthing hospitals. A new congenital heart defect diagnosis (ASD Primum) was included in the case definition, for a new total of forty-four BD under surveillance. The BDSS is currently conducting active surveillance for the most common birth defects that occur in PR and do not expect to add further diagnoses in the near future unless a specific need arises.

During the year 2008-2009, BDSS staff visited hospitals and provided trainings on the importance of reporting cases, and the natural history and etiology of birth defects. We promoted compliance with the BD Surveillance Law 351 of 2004 and Regulations 126 of 2007 among health service agencies and health care providers. The protocol for database management and analysis was in place and used by all members of the BDSS staff. All BDSS forms were evaluated and updated to enhance data collection. An abstraction audit was done for hypospadias cases in order to determine and improve the accurateness of the abstraction of medical information related to the diagnoses.

To improve BDSS database completeness, record linkages between BDSS and Vital Statistics (VS), among other data sources, were performed. From 2007 vital statistics record linkage we were able to capture six new cases not identified by the BDSS. Another six new cases were captured through the Down Syndrome Foundation of Puerto Rico during 2008-2009. A total of 79 (11%) children with BD were identified prenatally through the University District Hospital High Risk Clinic; once born diagnosis was confirmed.

The BDSS Annual Report with birth defects statistics up to 2007 was published and distributed to 5,000 health professionals in June 2009. BDSS information and statistics were also included in the DoH website, updated in June 2009, and is available at www.salud.gov.pr under "programas operacionales". Also, we published our surveillance outcomes in the December 2008 issue of the peer review journal "Birth Defects Research Part A: Clinical and Molecular Teratology". The BDSS data was also used for research. We actively collaborate with the Neural Tube Defects Rapid Ascertainment CDC Project. The BDSS also participated in the CDC Multi-State Study of the Epidemiology and Regional Variation of the Clubfoot. In February 2009, a poster entitled "Pilot Evaluation of the Satisfaction with Services of Families Referred to the CSHCN Pediatric Centers by the PR BDSS" was presented at the National Birth Defects Prevention Network (NBDPN) Annual Meeting.

The BDSS continues to provide genetic counseling. The percent of families with children identified by the BDSS that were contacted and received counseling and educational material regarding the BD diagnosis, increased significantly from 27% in 2007-2008 to 62% in 2008-2009. The BDSS has a comprehensive system for referrals to the Early Intervention Services System, Children with Special Health Care Needs (CSHCN) Pediatric Centers and other programs that offer early intervention services. A referral protocol was established island wide and is being used by all the abstractors. A total of 212 (30%) of the live born children identified by the BDSS were eligible for CSHCN services, of which 77 (36%) were referred. This referral system was evaluated. The evaluation showed a need to identify providers outside the CSHCN Program. A new provider directory was developed to help parents in the process of finding the services needed. We expect this directory will help the BDSS to double the number of families that receive orientation about needed services.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue the active BD surveillance system activities such as data collection, protocol updates, data analysis and evaluation.				X
2. Coordinate activities with our collaborators to promote healthy lifestyles in order to prevent birth defects and to organize and conduct activities associated with BD prevention month celebrations in PR.			X	
3. Improve the referral system to CSHCN centers for children with birth defects.		X		
4. Offer genetic counseling to affected families.			X	
5. Monitor periodically the existence of birth defects clusters.				X
6. Develop culturally sensitive educational materials on the BDSS birth defects.			X	
7. Offer trainings on the birth defects surveillance system to hospital staff, and health care professionals throughout the Island.				X
8. Prepare and publish the Annual BD Report in order to disseminate the surveillance results.				X
9. Disseminate regulations and promote compliance with Law 351 among health care providers, including the importance of early diagnosis and referral to specialized services.				X
10. Develop a specialist health provider directory to improve access to early services.			X	

b. Current Activities

We continue with our active, population based surveillance system for 44 BD. We continue to perform record linkages between VS and BD surveillance data sets to identify cases that might have been missed. Also, the Down Syndrome Foundation, the Spina Bifida Association and ASES shared their data with our program to perform record linkages. The BDSS Annual Report with 2008 data will be published in June 2010. Our program had the opportunity to contribute data to help establish the baseline data for the survival objective HP2020: Increase in survival to one year of age among infants with Down syndrome. A BD symposium to update and increase knowledge among health professionals was held in Guaynabo in November 2009.

We continue to provide genetic counseling and to refer to the CSHCN Program all eligible children. Also the new provider directory was used to coordinate services for families identified through the BDSS. Culturally sensitive educational materials on 6 BD: gastroschisis, omphalocele, oral clefts and trisomies 13, 18, and 21 were developed and printed and are available for distribution. In March 2010, we attended the NBDPN Annual Meeting where we presented a poster entitled "Neural Tube Defects Clinical subtypes and Associated Anomalies in a Hispanic Population, Puerto Rico, 2001-2008" for which we received a First Place poster award. Also, during this meeting the Program received the NBDPN BD Education and Prevention Award for its outstanding prevention efforts.

c. Plan for the Coming Year

Next year, we will continue our active population based surveillance for the 44 birth defects included in the BDSS as required by Law 351 along with the Island wide BD prevention activities. We will modify the current surveillance protocol as needed. Monthly trainings will be held with the abstractors in order to improve their abstracting skills. Among the topics to be covered are the different aspects of the birth defects surveillance system as well as the natural history and

etiology of birth defects. We will continue performing record linkage with vital statistics data, medical insurance companies, and other agencies in order to improve the completeness of our database. In addition, we plan to maintain our efforts toward establishing new partnerships with entities that may help us identify additional data sources and thus increase our potential to identify all birth defects cases included in our surveillance system. We will keep working in the development of a BD risk factor questionnaire for all parents identified with affected pregnancies in order to maintain a surveillance of BD risk factors along with the BD surveillance.

We will continue to provide genetic counseling, distribute educational materials and to refer all eligible children to the CSHCN Program and other specialists in our provider directory. A copy of this directory will also be distributed to all birthing hospitals. We plan to develop and implement a tracking system to enhance the referral protocol and ensure timely referral to services and to assess service utilization.

We will continue to disseminate an annual surveillance result report and to increase awareness of birth defects prevention measures among the general population and health care professionals. The seventh BDSS Annual Report with 2009 updated statistics will be prepared and published by June 2011. We will continue to publish our surveillance outcomes in the peer review journal "Birth Defects Research Part A: Clinical and Molecular Teratology". BDSS information and statistics will be updated in the DoH website as necessary and will be available through a web-based interactive data query system managed by the NBDPN. We also plan to offer health care providers educational activities with the purpose of promoting awareness of the need to continue promoting birth defects prevention messages and the surveillance activities currently occurring in PR.

Efforts to increase PR Alliance for Birth Defects Prevention membership will continue. We will identify and invite potential collaborators and stakeholders to become new members. The BDSS will celebrate BD prevention month with a series of activities during the month of January 2011, including a mass BD prevention media campaign.

State Performance Measure 7: *Reduce the prevalence at birth of neural tube defects (NTD's)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	4	3	6	6	6
Annual Indicator	10.3	7.4	12.0	9.0	8.8
Numerator	52	36	56	41	40
Denominator	50687	48744	46719	45664	45664
Data Source				Birth Defect Surveillance System	Birth Defect Surveillance System
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	5	5	5	5	

Notes - 2009

Updated data for 2007 and 2008.

Numerator Provided by the Birth Defects Surveillance System of the PR Department of Health.

Denominator: Provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2008

Updated data for 2006 and 2007. The source of the 2008 numerator is the BDSS, and the source of the denominator is the Vital Statistics Live Birth Certificates. For year 2008 the denominator was estimated using the counts from 2007.

Notes - 2007

The source of the numerator is the BDSS, and the source of the denominator is the Vital Statistics Live Birth Certificates.

a. Last Year's Accomplishments

During 2008-2009, we continued promoting folic acid use to reduce Neural Tube Defects (NTD) prevalence at birth. A wide variety of activities were developed to raise awareness about the importance of taking folic acid (FA) on a daily basis. We have participated in 21 health fairs and reached 638 participants at the community level. We provided all MCH staff (visiting nurses, health educators, community health workers and social workers) with current FA and Birth Defects (BD) prevention messages. We also trained all health educators of one of the major insurance companies. We distributed 32,434 educational materials and promotional incentives island wide. The Alliance for BD Prevention held 6 meetings. Eight island wide coverage radio stations disseminated one BD prevention public service announcement (PSA) and one TV station disseminated the two BD prevention commercials filmed with the collaboration of the Alliance for BD Prevention.

On October 2008, we celebrated the 7th FA Awareness Day in 40 university campuses. Over 4,855 university students participated in the celebration. A total of 1,000 public school students island wide were also reached. Participating universities distributed educational material and MCH Division staff provided information on the importance of folic acid consumption for the prevention of NTDs. All participating students received free samples of fortified cereals with 100% folic acid, educational materials and promotional items.

In January 2009, we celebrated several activities to commemorate the BD Prevention Month. These activities promoted the importance of daily FA intake, the prevention and treatment of diabetes, obesity and STD's like Chlamydia, hepatitis B, HIV and syphilis as strategies to prevent BD. As part of the activities held to celebrate BD prevention month we participated in one TV, two radio and six newspaper interviews. A one-page article was published in "El Nuevo Día", the local newspaper with the largest circulation island wide. Other regional newspapers followed their lead and published additional articles. In addition, the Senate, four major banks, and 30 University branches distributed material containing prevention messages to their clients, employees and students, respectively. Kits with information on BD prevention, prepared by the National Birth Defects Prevention Network (NBDPN), were distributed to 100 key collaborators. Members of the Alliance have also contributed to disseminate the message by publishing several articles in their companies' web pages.

During 2008-2009, BDSS staff made efforts to increase BD awareness among health professionals on the topics of preconceptional health, birth defects incidence and their prevention, natural history and etiology. We gave a total of 29 lectures attended by 2,656 persons; 23 to 717 health professionals, 3 at the community (1,209), and 3 to 730 teachers of the Department of Education. The post intervention evaluation for the instructional modules included in the public schools curriculum was completed and the results were used to design new strategies to promote compliance with the existing DoH Public Policy which recommends taking a multivitamin containing 400 micrograms of FA daily for all women 10 years of age or older. The FA public health policy was amended to update FA prevention messages in November 2008. The collaborative effort between the Department of Education and the Folic Acid Campaign provides for the inclusion of FA prevention messages in the public school health curriculum at the

elementary, middle and high school level on a permanent basis.

The last 48 BD educational modules were distributed among health professionals. They included information on BD Law 351, BD Surveillance System, a summary of major BD, and FA vitamin. We were able to offer 5 CME credits for those who completed it. A second edition of the BD educational module was developed. This new edition includes a full section on preconception care and BD prevention, BD Surveillance System, a summary of major BD, and the new FA Vitamin DoH Public Policy. For those who completed the new module, we will offer 6 CME credits.

The BDSS is still collecting data of NTDs for years 2008-2009. A preliminary analysis of NTDs prevalence at birth data showed a decrease from 11.99 (95% CI 9.06-15.57) in 2007 to 8.76 (6.25-11.93) in 2009. However, this decrease was not statistically significant.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Increase awareness among primary care providers of the need to recommend daily folic acid consumption.			X	
2. Use trained insurance company personnel to promote use of daily folic acid among patients visiting medical offices.			X	
3. Hold meetings with key stakeholders to develop strategies directed at increasing use of folic acid.				X
4. Promote the use of the Folic Acid Educational Module among teachers covering health issues in PR schools.			X	
5. Coordinate activities to increase awareness of birth defects and strategies to prevent them among the general public.			X	
6. Coordinate Folic Acid Awareness Day observances in local university campuses.			X	
7. Coordinate Birth Defects Prevention Month activities.			X	
8. Continue interagency collaborative efforts to promote use of folic acid in the media.				X
9. Continue regular meetings of the State Alliance for Birth Defect Prevention.				X
10. Evaluate levels of folic acid awareness and consumption among women of reproductive age.				X

b. Current Activities

The benefits of FA consumption and information regarding NTD prevention continue to be provided at the community level. We have participated in 94 health fairs and reached 3,679 participants. Also, 31 conferences were offered to the community in which 904 people were impacted. We provided 6 trainings and impacted 210 physicians, nurses, health educators, community health workers, and social workers with current FA and other BD prevention messages. We have distributed 34,283 educational materials and promotional incentives. The FA Awareness Day was held on October. Three island wide coverage radio stations disseminate a BD prevention PSA. The BD prevention commercials filmed with the collaboration of the Alliance for BD Prevention are being disseminated in all WIC Clinics. The Alliance for BD Prevention has held 3 meetings.

To better understand the etiology of NTDs in PR, and to develop better preventive strategies, a study of its clinical subtypes and associated anomalies was done. The FA instructional module included in the public schools curriculum at the Junior and Senior High School level was updated with the collaboration of the Department of Education. All health science teachers, social workers

and counselors received a short training on updated BD prevention messages and received a CD with the 2nd edition of the module, a presentation and educational material. In order to evaluate our preventive efforts a survey is currently being done to public school students.

c. Plan for the Coming Year

For the coming year, the Program will continue offering educational activities. Efforts toward increasing the level of awareness among birthing hospitals staff and health care providers of their need to promote daily folic acid intake will also continue. In addition, health care providers will be trained to increase their knowledge regarding additional birth defect prevention strategies through surveillance activities occurring island wide. Besides folic acid use, the BD Prevention Campaign will also focus on prevention of diabetes and obesity, two risk factors associated with NTDs according to recent scientific literature.

The distribution of culturally sensitive educational materials that include messages related to diabetes, obesity and the importance of daily folic acid use among other birth defects prevention strategies will continue through participation in health fairs at the community level, schools, universities, and public and private agencies. MCH staff will also continue offering educational activities for the promotion of daily folic acid use. New information directed to people of the community regarding BD prevention will be posted in the DoH Webpage. In addition, we will continue to promote the collaborative efforts we have already established with local health insurance companies in order to have their health care providers help us increase folic acid awareness and actively promote daily folic acid intake among their clientele. Our annual celebration of the Folic Acid Awareness Day will be held at local universities and public schools facilities, in October 2010. In January 2011, we expect to celebrate again the BD prevention month with a series of activities.

We plan to continue supporting the PR Alliance for Birth Defects Prevention in their efforts, and with their help continue to develop and distribute culturally sensitive educational materials. We will continue our collaborative efforts with other agencies and stakeholders to develop additional strategies to prevent NTD's. A Preconceptional Health Committee was established and, in collaboration with other collaborators of the Program, they will help us promote preconceptional messages that will help prevent the occurrence of birth defects.

To monitor compliance with folic acid use in WCBA, MCH continues conducting the ESMIPR survey. Results from the 2010 bi-annual PRAMS-like survey will be available by the end of the summer 2011. It will provide us with data regarding daily folic acid use. To monitor compliance with folic acid use in adolescents, five questions regarding folic acid use will be included in the YRBSS. Also, we will coordinate teen focus groups to develop new strategies on how to disseminate folic acid messages among teens.

State Performance Measure 8: *The rate of deaths to children aged 1-14 caused by asthma*

Tracking Performance Measures

[Secs 485 (2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Performance Objective	0.2	0.2	0.1	0.1	0.1
Annual Indicator	0.2	0.1	0.6	0.1	0.1
Numerator	2	1	5	1	1
Denominator	803507	791992	774347	758825	748397
Data Source				Death Certificate	Death Certificate

				OITA	OITA
Is the Data Provisional or Final?				Provisional	Provisional
	2010	2011	2012	2013	2014
Annual Performance Objective	0.1	0.1	0.1	0.1	

Notes - 2009

Updated data for 2007.

Numerator: Provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population Estimates provide by the US Census.

Because Vital Statistics (VS) data was not available for 2009, an estimated data was obtained through trend analysis using the last 9 years (2000-2008) and a logarithmic curve estimation regression model. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

a. Last Year's Accomplishments

In 2008, one asthma related death was reported. To prevent asthma death the Puerto Rico Asthma Project (PRAP) committees selected priorities interventions to be implemented based on asthma surveillance data and partners recommendations. Interventions implemented included:

Training to Primary Care Providers (PCPs) and other health professionals in the asthma diagnosis and management: A total of ten (10) CME trainings to PCPs and health professionals on the use of NAEPP Asthma Treatment Guidelines in geographical areas with the highest rates of asthma morbidity and mortality. A total of 626 persons participated in those trainings. Participation was excellent since 90% of those pre registered attended. Local HICs helped identify and invite PCPs. The main goal of the activity was to help PCPs and other health professionals provide quality care and education to children and adults with asthma. Training topics included concepts on the diagnosis of asthma; the best treatment for the asthmatic patient and strategies to prevent asthma, and study cases. Materials were provided by "Proyecto CALMA", PR Lung Association and the speakers. Adult Asthma Management guidelines and pocketguides for asthma management in adults and children were distributed during trainings. Asthma trainings were favorably evaluated.

Public policy development: During the last two years the PRAP and other partners have been developing a series of documents intended to redefine health services in the government health insure population. The Puerto Rico Department of Health Administrative Order #248 and the Law Project #1329 of the Senate that aim to increase accessibility of necessary health care services and better access to maintenance asthma drugs.

Analysis, reports and disseminations (ARD) of asthma data: ARD were conducted on the new gathered asthma prevalence and mortality data. This new information brought a new perspective of asthma care in Puerto Rico. It was found that about 50% of our patients with asthma are

uncontrolled and action needs to be taken to prevent emergency room visits, hospitalizations and deaths.

Partner's asthma related activities: Governmental, non-profit and private institutions continues their effort towards improving the asthma situation in Puerto Rico. Different activities have been conducted with different methodologies. Although there is no common registry of these activities all partners agree to follow recommendations on the NAAEP guidelines.

World Asthma Day (WAD) activities: Various standard initiatives were conducted during the WAD week which includes a press conference by the Secretary of Health to present the SAP and Epidemiological Asthma Profile, an asthma supplement in a magazine and news papers and a media tour emphasizing the empowerment of patients in asthma self-management.

Writing Federal Proposal: Several Asthma Partners wrote different federal proposal to address the asthma situation in Puerto Rico.

Puerto Rico Asthma Web Portal: The Puerto Rico Asthma Web Portal was launched as part of the initiative to make asthma information more accessible. Inside it can be found all the documents generated by PRAP and other useful links. We plan to enhance this portal with new information and initiatives.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Hold meetings with SAP Focus Areas Committees to prioritize interventions based on identified needs and PRSS data.				X
2. Promote policy changes for asthma care and management.				X
3. Continue asthma surveillance system to assess asthma morbidity, mortality, utilization of health services and work related asthma.				X
4. Train health professionals in asthma management according to NAEPP asthma management guidelines.				X
5. Analyze and interpret asthma data, and report findings and recommendations to key stakeholders.				X
6. Increase level of awareness among key stakeholders and the general population regarding asthma in PR and the State Asthma Plan.			X	
7.				
8.				
9.				
10.				

b. Current Activities

During this current year, one asthma death has been recorded. The MCHD-PRAP is conducting activities included in the SAP to meet the HP 2010 objectives for Focus Area #24. Some of these are: expanding the Puerto Rico Asthma Surveillance System (PRSS); identifying geographical areas with high asthma morbidity, mortality and utilization of services rates; training PCPs and other health professionals in asthma management; increasing the general public's level of awareness regarding the asthma situation in PR. In addition, we are developing an evaluation plan to monitor program performance. Public policy activities are ongoing to work towards reducing disparities. We still are working in expanding partnership activities throughout the island.

The PRSS continue its process of analyzing, reporting and disseminating health services utilization claims, mortality, prevalence and work-related asthma. The Asthma Call Back Survey was implemented for the first time during this year. PRSS has been presented in different venues in order to raise awareness of the Puerto Rico asthma burden.

The PRAP staff has been offering talks regarding the asthma situation in Puerto Rico to conferences coordinated by diverse partners. Those partners are governmental, non-profit and private institutions. The idea of the conferences is to continue the effort towards improving the asthma situation in Puerto Rico. We plan to continue contributing in this collaboration.

c. Plan for the Coming Year

The rate of deaths due to asthma in children with 1 to 14 years of age remained low and no significant increase were assessed from 2004 to 2009. This PM will be deactivated to allow the introduction of a new PM that responds to the needs of children in this age group evidenced in the needs assessment. However, efforts will continue to monitor these activities by the MCH staff and the PRAP. In addition, this measure is covered by the HSCI 01 (hospitalizations for asthma in children less than 5 years of age).

Given the importance of the efforts towards dealing with the asthma in Puerto Rico, during the following year the PRAP will continue implementing the State Asthma Plan. It is planned to conduct a total of eight activities on the diagnosis and management of asthma in the adult and child population. It is expected to impact at least 500 PCP's and respiratory health professionals. The main goal, as previous educational activities, is to help PCPs and other health professionals provide quality care and education to asthma patients.

The PRAP will fund "Proyecto Aire" to replicate four activities to educate children and their caregivers on the management of their asthma condition. We expect to impact 200 children and their caregivers. In addition, we will fund the "An Asthma Friendly Environment" (SAFE) project to replicate four of their educational activities. SAFE is an interdisciplinary educational program which offers training to school teachers in the following topics: Indoor and outdoor air quality and the relationship with asthma and other respiratory conditions and how to avoid asthma trigger within the classroom. We expect to impact 200 teachers during the next year.

Although different initiatives have been conducted to change Public Policy in Puerto Rico they have not been adequately implemented. During the next year, the PRAP with other partners will advocate toward the correct implementation of the newly developed Law Project #1329 of the Senate that intends to improve accessibility to health care services and access asthma maintenance drugs; and Law #56 that allows school children to use prescribed asthma drugs at schools settings in the event of an asthma attack.

The asthma surveillance system will continue its task to survey asthma related health indicators and in collaboration with the Asthma Coalition of Puerto Rico we will continue disseminating effort of asthma related information during the week of the World Asthma Day. We also plan to enhance the PRAP Web Portal with updated information and initiatives.

E. Health Status Indicators

Introduction

Relevant, consistent information is an essential tool to carry out an accurate analysis and evaluation of the health status of a population, make evidence-based decisions and delineate strategies to promote good health. This information is obtained from a series of health indicators

used to calculate and evaluate the different aspects of health that characterize the target population.

Several years ago the MCH Division developed the Integrated Index of Maternal and Infant Health Status to assess the MCA health condition in PR. This instrument includes 15 indicators chosen from birth and death files, and is separated by municipalities. Personnel at regional level are provided with this instrument to analyze the information pertinent to the population at their particular setting and to incorporate the identified needs in their action plan.

MCH programs at regional level are responsible for disseminating important health information through meetings convened by MCH Regional Boards (RB), a strategy formerly developed by the SSDI project and that includes the ECCS project which requires working groups as part of its action plan. Public agencies and non-profit private organizations join forces in these RBs to eliminate barriers in an effort to provide better health services to our MCA population. Also, an MCH Health Status Book, prepared by the SSDI project and that contains the results of the studies carried out by the MCH Division, is available for those interested.

Health Status Indicators 01A: *The percent of live births weighing less than 2,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	12.8	13.0	12.5	12.5	13.2
Numerator	6504	6355	5820	5722	5832
Denominator	50687	48744	46736	45675	44080
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using an exponential curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Low birth weight (LBW), very low birth weight (VLBW) and preterm birth are an increasing problem and constitute the number one cause of infant mortality in Puerto Rico. These indicators

have been monitored for years to determine the trend in LBW and VLBW births rates in Puerto Rico.

Since 2000 (10.8%) to 2007 (12.5%) the LBW rates have increased about 15.7%. Preliminary 2008 birth data reports no changes in this percent (12.5%), however this could change once we have the final data, therefore we will wait until the Vital Statistics database has been revised and information is made official before drawing conclusions based on this evidence. According to preliminary 2008, approximately 38% of infant mortality was due to low birth weight and prematurity.

Trend analyses were conducted using an exponential curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. Trend analysis projects that LBW rate for 2009 is 13.2%.

Efforts to improve these indicators are conducted by the MCH Program. Through the Home Visiting Program (HVP), the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants.

The WIC Program also contributes toward reducing these rates by focusing on women who present nutritional risk factors. During FY 2008-2009, the WIC Program provided services to 62,874 pregnant women.

Health Status Indicators 01B: *The percent of live singleton births weighing less than 2,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	11.7	11.9	11.2	11.2	11.5
Numerator	5798	5692	5152	5021	4977
Denominator	49675	47791	45809	44708	43239
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using a power curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Multiple pregnancy babies have a much higher risk of being born prematurely and therefore LBW or VLBW. However in Puerto Rico approximately 98% of the births were singleton and 11.2% were LBW for both preliminary data of 2007 and 2008.

Trend analyses were conducted using a power curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. About 98% of births for 2009 were single and 11.5% were LBW according to trend analysis.

Since the year 2000 (9.7%) to 2007 (11.2%) the singleton LBW rates have increased about 13%. Preliminary 2008 birth data reports no change on this rate but this could change once we have the final data, therefore we will wait until the VS database has been revised and information is made official before drawing conclusions based on this evidence.

In Puerto Rico the disorders related to length of gestation and fetal growth are the first causes of Infant Mortality (IM). Decreasing the rate of LBW, VLBW and premature births will decrease the IM rate. The MCH Program designed a new Prenatal Course similar to the one offered by the March of Dimes curriculum "Comenzando Bien". This Prenatal Course will focus on the special needs of the participants. It is composed of 4 sections that cover prenatal care, healthy eating habits, physical activity, orientation of labor and delivery, breastfeeding, newborn care, family planning, among others.

As mentioned on HSI 1A, the MCH Program is also collaborating with the Puerto Rico March of Dimes Prematurity Taskforce in the design of a campaign aimed at reducing the preterm births.

Efforts of the MCH Program continue through HVP program, Healthy Start and the WIC program with the objective of providing the pregnant women with the necessary tools for a healthy pregnancy.

Health Status Indicators 02A: *The percent of live births weighing less than 1,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	1.5	1.5	1.4	1.5	1.5
Numerator	736	729	652	686	661
Denominator	50687	48744	46736	45675	44080
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using a linear curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

For the last nine years the very low birth weight (VLBW) rates have remained the same at 1.4% from 2000 to 2007. The primary cause of VLBW is prematurity. VLBW babies are often born before 30 weeks of gestation. Preliminary 2008 birth data from the Vital Statistics reports that 93% of the VLBW infants were in fact premature. Although this is preliminary data, this tendency has remained during the past few years.

Since 2009 Vital Statistics data was not fully available; hence trend analyses were conducted using a linear curve estimation regression model based on the last 9 years (2000-2008). The MCH Program estimates that 1.5% VLBW babies were born during 2009. This rate has been the same for the last years and we do not expect this to increase.

As mentioned in the HSIs 1A and 1B, efforts to improve these indicators are conducted by the MCH Program. Through the HVP, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The CHWs educate pregnant women on the signs and symptoms of preterm delivery, the importance of early prenatal care, nutrition during pregnancy, oral health, among other educational activities aimed at improving pregnancy outcomes.

A preconception health pilot project that will target to diabetic women in reproductive age, particularly those in the interconceptional period, is being developed by the MCH Program. They will receive a series of educational interventions in the areas of diabetes control, nutrition, physical activity and women's health. The goal is to make them aware of the importance of controlling their diabetes during the preconceptional period in order to improve the outcomes of future pregnancies. The preconception health project is expected to start soon in two WIC clinics on the western side of the Island this fall. Once the project is fully evaluated the Committee will determine if it should be modified and/or expanded to other areas.

Also in collaboration with March of Dimes, a massive campaign aimed at women of reproductive age will be designed during this year with the objective of decreasing the rate of late preterm births. The PNC Card, the prenatal curriculum and the collaboration with other programs such as WIC, are some of the efforts that the MCH Program is conducting to reduce LBW, VLBW and preterm births in Puerto Rico.

Health Status Indicators 02B: *The percent of live singleton births weighing less than 1,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	1.2	1.2	1.2	1.2	1.2

Numerator	632	593	551	537	530
Denominator	50687	47791	45809	44708	44080
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using a linear curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

According to preliminary 2008 Vital Statistic (VS) data, the rate of VLBW in singleton is 1.2%. This rate has remained constant in the last few years. Trend analyses were conducted using a linear curve estimation regression model based on the last 9 years (2000-2008), because 2009 VS data was not available. This projection shows that for 2009 the VLBW rate is 1.2%.

Efforts of the MCH Program to decrease VLBW rates are the same aimed at reducing LBW and premature births. Through the HVP, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The patient prenatal care card, the prenatal curriculum and the collaboration with other programs such as WIC, are some of the efforts that the MCH Program is conducting to reduce LBW, VLBW and preterm births in Puerto Rico.

Health Status Indicators 03A: *The death rate per 100,000 due to unintentional injuries among children aged 14 years and younger.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	2.3	2.6	2.6	4.0	2.3
Numerator	20	22	21	32	18
Denominator	852745	839172	821286	806246	798343
Check this box if you cannot report the numerator because					

1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using a logarithmic curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Unintentional injuries are the number one cause of death among children younger than 14 years. The MCH Division monitors these deaths regularly using VS data. In 2000 the rate of unintentional injuries related deaths was 5.4/100,000. Since then it declined to a level of 2.5/100,000 in 2006. These reports reflect a 54% reduction in the death rate due to unintentional injuries for this period. Preliminary data VS for 2007 and 2008 revealed an increase in the number of children under 14 years of age that died due to unintentional injuries. In 2007, preliminary VS data revealed 21 children in this age group died due to this cause. In 2008, this number increased to 23. We project 18 deaths due to unintentional injuries using a logarithmic curve estimation regression model based on the last 9 years (2000-2008), because 2009 VS data was not available.

In 2008, motor vehicle crashes (MVC) continued to be the number one cause of death for children between the ages of 1-4 and for those in the 10-14 age groups. Nevertheless during that same year falls became the number one cause of death for kids between the ages of 5-9.

Of the 23 unintentional injuries related fatalities reported in 2008, 57% of them were associated with MVC and 13% due to burns. Other reported causes were falls and drownings.

The causes of unintentional injury related deaths vary with person's age and the developmental stage. During 2008 the second cause of death related to unintentional injuries among those in the 1-4 year old group were burns and for those between 5-9 years of age were burns and drownings. Among children 10-14 years of age, falls, electrocution and drownings caused similar rates of deaths due to unintentional injuries and were ranked as the second most common cause of deaths due to unintentional injuries in this age group. There were no reported deaths of infants due to unintentional injuries in 2008.

In 2007 the MCH Division analyzed the unintentional injury related deaths using 2001-2005 VS reports. Although no seasonal pattern was detected when all causes were evaluated together, once specific injuries were considered a seasonal pattern became evident.

Reducing unintentional injuries among the pediatric population is one of our top 10 priorities. Several public and private entities in PR share the responsibility of working to reduce unintentional injury related deaths. Most of the activities are centered on educational events. Key collaborators are the Police, Education and Fire Departments, the HSC, PCC and the EMSC.

The MCH staff provided a total of 1,022 educational interventions on the topic of unintentional injury prevention. A total of 12,652 persons benefited from them.

Additional topics covered by our staff that are pertinent to this issue are: first aid, how to prepare for hurricane season, establishing a family plan for disasters, selection of a safe toy and SIDS. These represent an additional 390 injury related prevention activities that reached 4,588 persons.

Health Status Indicators 03B: *The death rate per 100,000 for unintentional injuries among children aged 14 years and younger due to motor vehicle crashes.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	1.3	1.2	1.1	2.4	0.9
Numerator	11	10	9	19	7
Denominator	852745	839172	821286	806246	798343
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using an exponential curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2006 and 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

For the past decade our Vital Statistics reports have had unintentional injuries as the principal cause of death for children 1-14. Most of them were the result of motor vehicle crashes (MVC). Nevertheless, in 2008, deaths due to MVC in children less than 14 years of age represented only 5% of the total of MVC related deaths in PR. VS reports for 2008 reveal 13 deaths due to MVC in this age group. Among the 13 dead, 12 were males and 1 female. Five were less than four years of age; one was between the ages of 5-9 and seven between 10-14 years of age. Six were passengers. Using an exponential curve estimation regression model based on the last 9 years (2000-2008) of vital statistics data, we project 7 deaths due to unintentional injuries for 2009. This data was estimated due to the fact that 2009 Vital Statistics data are not available at this time.

During FY 2008-09, the Automobile Accident Compensation Administration (ACAA) calculates 157,000 vehicle collisions a year, an equivalent of 1 crash every 5 minutes. They reported 22 deaths and 4,089 injuries related to MVC among children 0 to 14 years. For calendar year 2009, the PR Highway Safety Commission report includes 19 deaths due to MVC during this period. Ten of these dead were females and 9 males. Of the total 6 of these reported MVC related deaths were alcohol related. None of them were among children less than 5 years of age. Three were in children between the ages of 5 and 9 year and three among those in the 10-14 years of age group. The proportion of females to males in these age groups was 2:1. For 2009, the PR Police Department reported 12 deaths among children 0-9 years of age. Eleven of them were described as passengers and one was a pedestrian. Seven of them were females and 5 were males.

According to the PR HSC the majority of MVC fatalities are due to excessive velocity, driving under the influence of drugs or alcohol, pedestrians and cyclist walking or riding in restricted areas, aggressive or negligent driving and lack of knowledge of highway safety rules.

For additional information regarding this HSI please refer to NPM 10.

Health Status Indicators 03C: *The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among youth aged 15 through 24 years.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	21.7	21.0	24.4	16.0	18.8
Numerator	128	123	141	92	108
Denominator	590940	586613	577715	574099	575918
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007 and 2008.

Numerator and Denominator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.

Trend analyses were conducted using a linear curve estimation regression model based on the last 9 years (2000-2008), because 2009 Vital Statistics (VS) data was not available. For the methodology used, refer to the Appendix 5.

Notes - 2008

Updated data for 2006 and 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Numerator: Obtained from birth data files provided by the Office of Informatics and Technology Advances, (OITA).

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2007

Narrative:

Official 2006 VS data reflected a total of 123 adolescents and young adults aged 15-24 died due to motor vehicle crashes (MVC). In 2008 preliminary VS data reveal a reduction in MVC related deaths. During that year, 90 adolescents and young adults aged 15-24 died due to MVC. Fifty of them (55.5%) were between the ages of 20-24 years of age. Thirty-four of them were described as drivers and 19 as passengers. Twenty-two were riding a motorcycle and 3 bicycles. One of them was a pedestrian.

For 2009, we are projecting 108 deaths due to unintentional injuries caused by MVC using a linear curve estimation regression model based on the last 9 years (2000-2008) of vital statistics data. This data has been estimated due to the fact that 2009 Vital Statistics data are not available at this time.

The Automobile Accident Compensation Administration (ACAA) dataset for 2009 includes 70 fatalities in this category (12.2/100,000).

For 2009, the PR Police Department reported 40 deaths among children 10-19 years of age. Seven of them were drivers, six pedestrians, seventeen of them were described as passengers, seven were motorcycle riders and three were classified as other. Twenty-eight of the dead were males and 12 females.

For calendar year 2009, the PR Highway Safety Commission reports 28 deaths due to MVC among those between the ages of 15-24. Eight of them were females and 20 males. Twenty out of the 28 occurred in the 21-24 age group category.

The Puerto Rico Highway Safety Commission provides information regarding fatalities due to MVC. In 2009, they reported one out of every four (25%) fatalities due to MVC occurred in adolescents and young adults between the ages of 15-24. Among all MVC related deaths 4 out of every 5 occurred in males and at least one third (35%) of them were alcohol related.

The PR NHSTA State plan 2010 states the DWI is the most common cause of MVC fatalities. It is more common among adolescents and young adults particularly during weekends. Efforts to increase the legal age for alcohol consumption to 21 in PR have failed so far; nevertheless, we will continue to support its approval. A Zero Tolerance Law for those under 18 was passed in

2004. Efforts continue to expand it to include other age groups.

To reduce these deaths the PR Highway Safety Plan has established several strategies. Among them are: lobbying to increase the legal age for alcohol consumption to 21, educational interventions directed at university and high school students, mass media campaigns, strict police enforcement of current laws, conducting traffic engineering projects to increase road safety among and conducting National Crackdown around local holidays, among others. Recently laws were enacted to reduce fatalities among motorcycle riders. They include: increasing to 18 the required age to drive a motorcycle, requiring taking and passing a practical exam prior to obtaining the license, establishing a dress code and requiring the use of a DOT certified helmet.

Health Status Indicators 04A: *The rate per 100,000 of all nonfatal injuries among children aged 14 years and younger.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	548.1	606.0	584.0	684.8	439.5
Numerator	4668	5085	4821	5521	3509
Denominator	851730	839172	825576	806246	798343
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Numerator: Provided by the Health Insurance Commissioner and the Administration for Compensation for Car Collision (ACAA).

Denominator: Population Estimates of the US Census.

Notes - 2008

Numerator 2008: Provided by the Health Insurance Commissioner and ACAA.

Denominator 2008: Population Estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

PR does not collect data from Emergency Room visits to monitor this HSI. Available data provided by the Insurance Commissioner and ASES based on Health Insurance Companies claims reports reveal 3,509 children 14 years of age or younger presented claims due to hospitalizations related to nonfatal unintentional injuries in 2009.

The MCH Division gathers information regarding other nonfatal injuries in children aged 14 years and younger from sources such as the PR Poison Control Center. Their 2009 report included information regarding type, intentionality and lethality of the exposure. According to them, 2,213 (24.7%) of the calls received by the PCC were related to exposures to potentially toxic substances in children 6 years of age and under. Among the substances to which this group was most frequently exposed in descending order were: cleaning products, plaguicides and

insecticides, silica gel, analgesics and cold and cough preparations. No poison related deaths were reported in this age group.

The MCH staff provided a total of 1,022 educational interventions on the topic of unintentional injury prevention. A total of 12,652 persons benefited from them. Additional topics covered by our staff that are pertinent to this issue are: first aid, how to prepare for hurricane season, establishing a family plan for disasters, selection of a safe toy and SIDS.

MCH Division staff members are actively involved with the EMSC Advisory Committee efforts to organize local emergency response efforts to insure those services injured children need are locally available, well coordinated, adequate and appropriate for their particular age group and follow the latest expert panel recommendations. Currently, the Committee is working on: categorizing hospital emergency rooms based on the level of services they are able to provide, reviewing and updating off line protocols for pre hospital management of pediatric emergencies according to the latest expert recommendations and guidelines; establishing policies directed at insuring emergency response vehicles have the pediatric equipment needed to adequately respond to pediatric emergencies; developing a standard inter hospital referral format and protocol; establishing a coordinated referral pattern and promoting the official establishment of an expert committee to oversee, organize and coordinate the entire local emergency response system.

During 2008-2009, the EMSC project certified 118 health care providers in PALS and 40 in ATLS. They are currently involved in increasing the current health system capacity to manage pediatric emergencies by training ER physicians that do not regularly treat pediatric patients on how to manage large scale pediatric emergencies. The trainings provide attendees basic pediatric emergency protocols, hands on sessions on the use of the Braeslow tape and on how to stock the emergency room area with the appropriate medications and equipment needed to manage pediatric emergencies.

Health Status Indicators 04B: *The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among children aged 14 years and younger.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	306.8	590.8	561.1	513.9	512.2
Numerator	2654	4958	4632	4143	4089
Denominator	865067	839172	825576	806246	798343
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2009

Numerator: Provider by the Health Insurance Commissioner and the Administration for Compensation for Car Collision (ACAA).

Denominator: Population Estimates of the Us Census.

Notes - 2008

Updated data for Fiscal Year 2007-2008.

2008 Numerator: Data provided by the Administration for Compensation for Car Collision.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

As expected, nonfatal injuries associated with motor vehicle crashes (MVC) are more frequent than the fatalities. Data for 2008-09 provided by the Automobile Accident Compensation Administration (ACAA) reported 4,089 non fatal MVC injuries among children aged 14 years or younger which represents a rate of 512.2/100,000 nonfatal injuries in the 14 or younger age group. This represents a decrease from the 2006 reported rate of 590.8/100,000.

Two hundred and seventy two (272) educational activities were offered by MCH staff to promote the use of car seats. A total of 2,887 persons participated in them. In addition, 273 persons attended 31 activities during which seat belt use was promoted.

In an effort to reduce MVC related deaths among pedestrians, cyclist and conductors in this age group the PR Department of Transportation (DOT) and the HSC in collaboration with the NHTSA have established 3 educational/recreational parks whose main goal is to teach 7-10 years the theoretical and practical implications of the PR Traffic Law and other traffic safety measures.

Puerto Rico has one of the highest safety belt usage rates in the nation (90.5%). Child restraint usage, however, decreased from 94.7% in 2007 to 88.3% in 2008. Commonwealth and municipal police agencies monitor compliance with the mandatory usage law during national mobilizations and during routine traffic related stops. Another strategy implemented to reduce these deaths by increasing the proper use of child restraints has been strengthening the permanent child restraint fitting stations in 42 of Puerto Rico's firehouses. Ninety firemen have been certified as Child Passenger Safety Technicians (CPST). They hold inspection clinics some with the partial sponsorship of national commercial chains.

Health Status Indicators 04C: *The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among youth aged 15 through 24 years.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	1,754.8	2,250.0	1,895.3	1,753.5	2,369.4
Numerator	10456	13199	11042	10067	13646
Denominator	595850	586613	582611	574099	575918
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and					

therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Numerator: FY 2008-2009 provided by the Administration for Compensation for Car Collision (ACAA).

Denominator: Population Estimates of the Us Census.

Notes - 2008

Updated data for Fiscal Year 2007-2008.

2008 Numerator: Data provided by the Administration for Compensation for Car Collision.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Data for BY 2008-09 from the Automobile Accident Compensation Administration (ACAA) revealed 13,646 non fatal motor vehicle crashes (MVC) among youth 15-24 years of age, which corresponds to a rate of 2,369.4/100,000 nonfatal injuries for those in the 15-24 age range. This represents an increase from the 2006 rate of 2,250.0/100,000.

The number of young drivers (16-25 years of age) involved in fatal crashes is high. Male drivers accounted for 93% of the MVC fatalities in this age group. During the period of 2002-2006, an average of 40% of young drivers that died tested positive for alcohol. Thirty-two percent of them were legally impaired.

Driving While Intoxicated continues to be the number one cause of fatal crashes in Puerto Rico and its rate is among the highest in the nation. Several bills have been passed to strengthen the DWI statutes. Among them are: zero tolerance law for under 18 became law, open container law, repeat offender law that provides for vehicle confiscation and mandatory jail of 48 hours and a mandatory forty-eight hours of jail sentence for intoxicated drivers with a minor under 15 years of age in the car. In addition, no DWI suspect can refuse to give a BAC sample.

To reduce alcohol related fatalities and morbidity officials are trying to pass laws such as Age 21 MDA and Zero Tolerance. Other strategies being used are Special Alcohol Units on weekend, nighttime patrols and sobriety checkpoints, participation in the national crackdowns, and finally, High Visibility Enforcement activities during the Christmas, summer season and Labor Day periods.

The PRHTSC has developed various youth awareness programs, most notably the FIESTA program. This program attempts to reach youth using their peers to promote traffic safety messages and alcohol abstinence among potential motor vehicle conductors. This program has been well received by students, teachers and school administrators and has continued to grow.

A recent motorcycle safety passed law became effective on October 9, 2009, which key elements strengthen the roadway, licensing and protective gear requirements of the current primary helmet law.

Health Status Indicators 05A: *The rate per 1,000 women aged 15 through 19 years with a reported case of chlamydia.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	6.9	8.5	14.2	12.3	12.8
Numerator	1015	1243	2075	1806	1858
Denominator	146448	145916	145661	146378	145303
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Updated data for 2007.

Numerator: Provided by STD/HIV Surveillance System, PR Department of Health.

Denominator: Population estimates of the US Census.

Notes - 2008

2008 Numerator: Data provided by the STD/HIV Surveillance System, PR Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

Chlamydia is the most common bacterial STD disease and the most reported in the United States. In Puerto Rico, it is the most common STD informed among the adolescent population. Since it is an asymptomatic disease, those who contract it may not seek timely and appropriate treatment, being exposed to serious health outcomes, such as Pelvic Inflammatory Disease (PID) in women and infertility in both males and females. Also, pregnant women who have been infected are in danger of delivering a baby with birth defects.

A total of 7,312 new cases of Chlamydia were registered in Puerto Rico by the STDs Surveillance System Office in 2009, a total of 6,217 females and 1,095 males. Of these, there were 2,046 cases in the 15-19 years old range. Females in this age group constituted a rate of 12.9 per 1,000 women 15-19 years old (1,858), while 188 male cases in this age range were reported. A 5% increase was observed in the number of new cases in females in this category when compared to those reported for 2008 (1,806: 12.3/1,000). Nevertheless, there had been a 10% decrease in this parameter when comparing 2008 results with those for 2007 (2,075: 14.3/1,000). Preventing infection with Chlamydia has been consistently emphasized by way of education efforts on the subject and screening opportunities directed to this population group.

Increasing knowledge and understanding on how to prevent Chlamydia infection including access to preventive health care services, such as routine Chlamydia screening, may help detect asymptomatic cases and reduce this infection's prevalence and future consequences. For these purposes, the MCH Division will continue to provide training opportunities to Home Visiting

Nurses on this matter, and they in turn will educate participants of the Program, particularly targeting adolescent females during individual interventions. If needed, referrals will be made for screening and treatment. This complies with the Pediatric Preventive Health Guide, which recommends Chlamydia screening for adolescents in the 15-17 years old category. Also, the STD/HIV Prevention Program will continue visiting school settings across the Island to educate adolescents and provide them free urine test screening for Chlamydia in an effort to achieve that more adolescents accept being screened. This way, more cases will be detected and referred for adequate and prompt treatment. The MCH Division will collaborate in this endeavor. Educational material on the subject will be distributed to this age group component by the adolescent health promotion staff within the MCH Division, through peer health promoters in various schools settings and at educational activities. Also, the PR Birth Defects Surveillance System will continue disseminating a brochure aimed at women of childbearing age to inform them on the risks of being infected with Chlamydia and the importance of receiving treatment if needed prior to pregnancy to avoid having a child with birth defects.

Health Status Indicators 05B: *The rate per 1,000 women aged 20 through 44 years with a reported case of chlamydia.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2005	2006	2007	2008	2009
Annual Indicator	3.2	4.0	6.6	5.9	5.9
Numerator	2288	2807	4651	4109	4129
Denominator	705472	703727	701558	696588	696718
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2009

Numerator: Provided by STD/HIV Surveillance System, PR Department of Health
Denominator: Population estimates of the US Census.

Notes - 2008

Updated data for 2006 and 2007.

2008 Numerator: Data provided by the STD/HIV Surveillance System, PR Department of Health.

2008 Denominator: Population estimates of the US Census.

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Narrative:

In 2009, the STD Surveillance Office reported 4,129 new cases of Chlamydia in females in the 20-44 age range. The rate for this age group was 5.9/1,000. The rate remained the same as that of 2008 (4,109 cases: 5.9/1,000). There had been a 10.6% decrease when comparing 2008 data with that of 2007, when the rate in this category was 6.6/1,000. Consistent educational and

screening activities at community and target population groups have continued in an effort to raise awareness on the risks of being infected with Chlamydia. MCH staff has continued providing individual orientations and learning events directed to participants of the different programs, such as the Home Visiting Program, and at community level. The PRDOH STD/HIV Prevention Program is engaged in providing education to the community at large on all aspects related to this infection. Health providers in particular are addressed with educational events on the subject to increase their commitment to educate and provide routine Chlamydia screening to their patients, especially females. This may in turn reduce the infection's prevalence and related health complications. As mentioned in HSI 5A, the PR Birth Defects Surveillance System will continue approaching women of reproductive age to educate them on the existence of Chlamydia infection, its potential health consequences and the need to have adequate and prompt treatment prior to pregnancy to avoid the risk of having an infant with birth defects associated to this infection. A brochure they developed will serve these purposes.

Health Status Indicators 06A: *Infants and children aged 0 through 24 years enumerated by sub-populations of age group and race. (Demographics)*

HSI #06A - Demographics (TOTAL POPULATION)

CATEGORY TOTAL POPULATION BY RACE	Total All Races	White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian or Other Pacific Islander	More than one race reported	Other and Unknown
Infants 0 to 1	49946	0	0	0	0	0	0	49946
Children 1 through 4	194750	0	0	0	0	0	0	194750
Children 5 through 9	260751	0	0	0	0	0	0	260751
Children 10 through 14	292896	0	0	0	0	0	0	292896
Children 15 through 19	295930	0	0	0	0	0	0	295930
Children 20 through 24	279988	0	0	0	0	0	0	279988
Children 0 through 24	1374261	0	0	0	0	0	0	1374261

Notes - 2011

Narrative:

In 2000 Census, 1,520,995 children and adolescents aged 0-24 yrs lived in PR. This figure represents 40% of the overall population of PR. The 2008 PR Community Survey (PRCS) estimated that 35% (1,382,803) of the total population in PR were children and adolescents up to 0-24 years old. This estimate represents a 12.5% reduction when compared to 2000. The major decline in population occurred in the following age groups: 10-14 yrs (22%); 15-19 yrs (22%); and 20-24 yrs (20%) for 2008.

The major racial groups in PR are white and black. Nearly 86% of people in PR classified their race as white, while 8% reported their race as black, according to the 2000 Census. In the 0-24 yrs old group (1.5 million of the total population), 80% were white, and 8% were black.

According to the 2008 PRCS, 1.3 million were children up to 24 yrs old. Of these, 75% were white and 6.5% were black. The remaining children were reported as other races. However, we are certain that the information under the race category reported in the Census in PR is biased for

two main reasons. First, the question does not include other racial categories used by Puerto Ricans. Second, there is a social stigma attached to being black among Puerto Ricans. Nevertheless, in PR there is not a significant disparity in race.

Comparing 2000 and 2008, the size of the child and adolescent group declined 12.5%. The natural growth in PR continues to decrease as a consequence of the declining natality rates over the last decade. The migration of Puerto Ricans to the US mainland and the fact that women in childbearing age are postponing motherhood also contribute to this situation. A long-term decline in fecundity rates has been observed in PR. Preliminary data for 2008 suggest that the fecundity rate has fallen to 1.7 births per woman. Nevertheless, it has remained unchanged since 2007 (1.7).

For 2009, the migration from PR to US mainland continues, mainly as a consequence of the economic recession.

Appropriate access to contraceptive methods and education regarding pre and interconceptional care contributes to optimal socioeconomic and health conditions for the family. GIP does not cover contraceptive methods. The MCH Program faces a challenge in its efforts to provide family planning services needed by GIP beneficiaries and uninsured. Depending on the availability of funds, the MCH Program provides them to a limited number of beneficiaries. MCH staff also disseminates information about the Program's services, and refers clients to other needed services, such as WIC. These actions aim to minimize disparities between the medically indigent and other populations.

Health Status Indicators 06B: *Infants and children aged 0 through 24 years enumerated by sub-populations of age group and Hispanic ethnicity. (Demographics)*

HSI #06B - Demographics (TOTAL POPULATION)

CATEGORY TOTAL POPULATION BY HISPANIC ETHNICITY	Total NOT Hispanic or Latino	Total Hispanic or Latino	Ethnicity Not Reported
Infants 0 to 1	0	49946	0
Children 1 through 4	0	194750	0
Children 5 through 9	0	260751	0
Children 10 through 14	0	292896	0
Children 15 through 19	0	295930	0
Children 20 through 24	0	279988	0
Children 0 through 24	0	1374261	0

Notes - 2011

Narrative:

Puerto Rico has been a territory of the United States since the end of the Spanish-American War (1898), and became a Commonwealth in 1952. Spanish is the official language of the Commonwealth of Puerto Rico. The vast majority of the ethnic population is Puerto Rican, while the most significant foreign ethnic groups are Dominicans and Cubans. These groups have a Hispanic background. The 2000 Census revealed the following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% was Asian, Native Hawaiian and other Pacific Islander.

Among the PRCS participants in 2008, 99% responded they considered themselves Hispanic and only 2.8% were foreign born. The major ethnic groups reported as living in the Island were:

Puerto Ricans (95.6%), Dominicans (1.8%) and Cubans (0.5%). The vast majority of the 0-24 year old population was Hispanic (99%) and spoke Spanish (95%) according to the 2000 Census and the 2007 PR Community Survey. There are no changes in the ethnic groups categories when compared by age subgroups.

As mentioned above, the Dominicans are the major foreign ethnic groups in PR and one of the most disadvantaged groups. They are concentrated mainly in the Greater Metropolitan Area close to San Juan, the capital city. Two categories of Dominicans live in PR: legal and undocumented residents. Low income Dominicans who are legal residents but have less than 5 years living on the Island, are not eligible for the Government Insurance Plan. If they cannot afford a Private Medical Plan, they run the same problem as the undocumented population: they have to either pay cash for health services, or, quite often, they do not seek care at all. However, they (including young population 0-24 years old) do receive emergency care services.

To overcome this situation, the MCH Program, through the Home Visiting Program (HVP), offers education and support to Dominican women regardless of immigration status. Most of the time, these women are enrolled in the HVP via referral from the CHW. The most significant challenge faced by the HVP Nurses is helping Dominican pregnant women receive prenatal care services through willing providers at low or no cost.

The MCH Program also provides services to this special population through the following programs, among others: a) orientation by the Perinatal Nurses while the woman is in the hospital and; b) activities developed by the Youth Health Promoters of the MCH Comprehensive Adolescent Health through positive youth development initiatives to raise awareness among their school peers - including Dominicans - of health-related issues.

Health Status Indicators 07A: *Live births to women (of all ages) enumerated by maternal age and race. (Demographics)*

HSI #07A - Demographics (Total live births)

CATEGORY Total live births	Total All Races	White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian or Other Pacific Islander	More than one race reported	Other and Unknown
Women < 15	142	0	0	0	0	0	0	142
Women 15 through 17	2885	0	0	0	0	0	0	2885
Women 18 through 19	4933	0	0	0	0	0	0	4933
Women 20 through 34	32411	0	0	0	0	0	0	32411
Women 35 or older	3694	0	0	0	0	0	0	3694
Women of all ages	44065	0	0	0	0	0	0	44065

Notes - 2011

Narrative:

The occurrence of many diseases, injuries, and other public health problems varies across different age groups and some are disproportionately higher in racial/ethnic minority populations in the United States. The collection of information by age groups and by race and ethnicity has

been an important component of public health surveillance efforts used to identify differences in health status among different groups.

For 2008, female population in Puerto Rico was 2,049,351 women (PR Community Health Survey), where 44,426 (49.3%) women between the ages of 15 and 50 years had a birth during the past 12 months. Birth rate for teens 15 to 19 years is 39 per 1,000 live births, 20 to 34 years, 77 per 1,000 live births and 35 to 50 years, 14 per 1,000 births.

Although 2009 Vital Statistics (VS) data is not completely available, a preliminary report reveals the birth rate for teens 18 to 19 years of age to be 85.6 per 1,000, 15 to 17 years of age to be 32.9 per 1,000 and 0.99 per 1,000 for teens in the 10 to 14 age group. Women 20 to 34 years had a birth rate of 76.5 per 1,000, whereas women of 35 to 49 years had a birth rate of 8.9 per 1,000.

Efforts to reduce teen pregnancies are made by the MCH Program through special projects that work directly with adolescents. The Comprehensive Adolescent Health Program (SISA, Spanish acronym) integrates all activities directed at reducing adolescent risk factors: pregnancy, unintentional injuries, violence, alcohol and drug use, etc. SISA trains middle school students as peer health promoters and organizes various activities to support them in their work.

The MCH CHWs also distribute educational material and offer group activities on the subject of sexual abstinence, how to keep your boyfriend/girlfriend and say no, peer pressure, interpersonal relations, among others, to adolescents across the Island. During FY 2008-2009, 411 activities of sexual education for parents and adolescents were offered to 11,575 participants.

Health Status Indicators 07B: *Live births to women (of all ages) enumerated by maternal age and Hispanic ethnicity. (Demographics)*

HSI #07B - Demographics (Total live births)

CATEGORY	Total NOT Hispanic or Latino	Total Hispanic or Latino	Ethnicity Not Reported
Total live births			
Women < 15	0	142	0
Women 15 through 17	0	2885	0
Women 18 through 19	0	4933	0
Women 20 through 34	0	32411	0
Women 35 or older	0	3694	0
Women of all ages	0	44065	0

Notes - 2011

Narrative:

The 2000 Census was the first census in PR since 1950 to include questions about race or ethnicity. For people in PR, as well as Hispanics/Latinos living in the United States, race is a subjective concept. This is evident in a comparison of race responses between people living in PR and Puerto Ricans living in the US. Although the groups share the same heritage, they have very different ideas about racial identity. About 81% of people in PR identified themselves as white in the 2000 Census, but Puerto Ricans residing in the United States were almost equally likely to say they were white (46%) as "some other race" (47%).

Data in the 2008 PR Community Survey Census shows that about 98.8% of people in PR identified themselves as Hispanic or Latino, where 95.5% reported to be Puerto Ricans, 0.3% Mexicans, 0.5% Cubans and 2.5% as other Hispanic or Latino. Around 75% of women of 15 to 50 years that has a birth during the last 12 months reported to be white, 8% as black, 0.16% as American Indian and Alaska Native, 0.42% as Asian and 11.5% as others.

Although 2009 Vital Statistics (VS) data is not completely available, a preliminary report reveals that from the 44,080 births of mothers residents of PR, 88.8% identified themselves as white in the birth certificate and 11.2% as blacks. In addition, 91.2% births were among Hispanic/Latino women, the majority Puerto Ricans (87.8%).

It must be noted that Dominicans are the most visible ethnic minority group on the island but the most difficult to count because of the illegal status of many of them. Between 1966 and 2002, a total of 118,999 Dominicans were legally admitted as immigrants to Puerto Rico, according to data from the US Department of Justice. In 2000, the Dominicans constituted 56.1% of all foreign-born population residing in Puerto Rico (Duany, 2005). During the process of recruiting participants for the HV Program, if the HVN's identifies a possible candidate of an illegal status, they are referred to programs that can help to solve their citizenship status.

Health Status Indicators 08A: *Deaths of infants and children aged 0 through 24 years enumerated by age subgroup and race. (Demographics)*

HSI #08A - Demographics (Total deaths)

CATEGORY Total deaths	Total All Races	White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian or Other Pacific Islander	More than one race reported	Other and Unknown
Infants 0 to 1	352	0	0	0	0	0	0	352
Children 1 through 4	33	0	0	0	0	0	0	33
Children 5 through 9	35	0	0	0	0	0	0	35
Children 10 through 14	49	0	0	0	0	0	0	49
Children 15 through 19	191	0	0	0	0	0	0	191
Children 20 through 24	388	0	0	0	0	0	0	388
Children 0 through 24	1048	0	0	0	0	0	0	1048

Notes - 2011

Narrative:

In 2008, the infant mortality rate was 7.5 per 1,000 live births which is lower than the reported on 2007, 8.3/ 1,000 live births. This represents a decrease of 9.6%. The Fetal and Infant Mortality Case Review Committee began reviewing IM cases in June 2009 only on the municipality of Mayagüez, although cases of Ponce are expected to be reviewed later on. Until now, recommendations were already suggested in areas such as nutrition, prenatal care, preconceptive care, support system, education and hospital services. It expects to disseminate these recommendations to the relevant agencies and stakeholders with the objective of decreasing the IM rate in PR.

Regarding the pediatric population, preliminary data for 2008 indicates that the death rate in the age group 1-14 was 11.3/100,000. The leading causes of death were: (1) unintentional injuries, (2) neoplasms, and (3) diseases of the nervous system. In the age group of 1-4 there were 35 deaths. Among them, the leading causes of death were: (1) unintentional injuries, (2) neoplasms and (3) infections.

In the 5-9 year old age group, 20 deaths were reported. The leading causes of death were: (1) unintentional injuries, (2) neoplasms (3) homicides. A total of 31 deaths were reported in the 10-14 year old age group for a rate of 10.6/100,000. The leading causes of death among them were: (1) unintentional injuries, (2) diseases of the nervous system, and (3) neoplasms. For the adolescent group aged 15-19, the death rate was 64.9/100,000. The leading causes of death were: (1) homicides, (2) unintentional injuries, and (3) suicides.

The death rate for the young adult population (20-24 years) was 118.2/100,000. The most frequent causes of death in this age group remain homicides, unintentional injuries, followed by suicides.

In terms of race, most deaths occurred in whites in all age groups: 1-14 age group (93.0%); 1-4 age group (94.3%); 5-9 age group (90.0%); 10-14 age group (93.5%); 15-19 age group (82.3%) and 20-24 age group (81.9%).

The major racial groups in PR are white and black. However, we are certain that the information under the race category reported in the Census in PR is biased for two main reasons. First, the question does not include other race categories used by Puerto Ricans. Second, there is a social stigma attached to being black among Puerto Ricans. Nevertheless, there is not a significant disparity in race.

Health Status Indicators 08B: *Deaths of infants and children aged 0 through 24 years enumerated by age subgroup and Hispanic ethnicity. (Demographics)*

HSI #08B - Demographics (Total deaths)

CATEGORY Total deaths	Total NOT Hispanic or Latino	Total Hispanic or Latino	Ethnicity Not Reported
Infants 0 to 1	0	352	0
Children 1 through 4	0	33	0
Children 5 through 9	0	35	0
Children 10 through 14	0	49	0
Children 15 through 19	0	191	0
Children 20 through 24	0	388	0
Children 0 through 24	0	1048	0

Notes - 2011

Narrative:

In 2008, the preliminary data on infant mortality rate was 7.5 per 1,000 live births which is lower than the reported on 2007, 8.3/ 1,000 live births.

The major ethnic groups in Puerto Rico are Puerto Ricans, followed by Dominicans, all of them Hispanic (99%).

Vital Statistic Data for 2008 reported 342 infant deaths. Among them, 291 (85.6%) were born to Puerto Rican women, 27 (7.9%) to women from US mainland, 9 (2.6%) from Dominican Republic and the rest from other nationalities. Most infants born to Puerto Rican women died due to prematurity and low birth weight while only two infants born to Dominican women died due to prematurity.

In Puerto Rico the first cause of death among infants is prematurity and low birth weight. The literature shows that the survival of very low birth weight (VLBW) and preterm births is higher in infants born in tertiary perinatal centers than infants born elsewhere. According to VS data, the percentage of VLBW infants delivered in facilities prepared to manage high risk deliveries and neonates was 39.1% in 2008.

MCH Program established a Perinatal Care Guidelines Review Committee (PCGRC) in 2007. According to these guidelines, 42% of the hospitals offered only basic perinatal services, 30% specialized services and 27% subspecialized services. Most of the subspecialized facilities are located in the Metropolitan Health Region (33.3%).

Considering PCGRC guidelines for the classification of birthing hospitals, the MCH Program will perform a descriptive analysis to identify newborns outcome depending on their place of birth. The findings of this study will be shared with perinatal providers and executive directors of birthing facilities across the Island. We expect birthing hospitals will be able to coordinate among themselves and establish a regional referral network based on their assigned level of care.

Regarding the pediatric population, preliminary data for 2008 indicates that the death rate in the age group 1-14 was 11.3/100,000. The leading causes of death were: unintentional injuries, neoplasms, and diseases of the nervous system. In the age group of 1-4 VS reported 35 deaths. Among them, the leading causes of deaths were: unintentional injuries, neoplasms and infections.

In the 5-9 year old age group, 20 deaths were reported. The leading causes of death were: unintentional injuries, neoplasms and homicides. A total of 31 deaths were reported in the 10-14 year old age. The leading causes of death among them were: unintentional injuries, diseases of the nervous system, and neoplasms. For the adolescent group aged 15-19, the death rate was 64.9/100,000. The leading causes of death were: homicides, unintentional injuries, and suicides.

The death rate for the young adult population (20-24 years) was 130.8/100,000. The frequent causes of death in this age group remain homicides, unintentional injuries, and suicides.

Health Status Indicators 09A: *Infants and children aged 0 through 19 years in miscellaneous situations or enrolled in various State programs enumerated by race. (Demographics)*

HSI #09A - Demographics (Miscellaneous Data)

CATEGORY Misc Data BY RACE	Total All Races	White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian or Other Pacific Islander	More than one race reported	Other and Unknown	Specific Reporting Year
All children 0 through 19	1094273	0	0	0	0	0	0	1094273	2009
Percent in household headed by single parent	44.2	0.0	0.0	0.0	0.0	0.0	0.0	44.2	2008

Percent in TANF (Grant) families	24.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	2008
Number enrolled in Medicaid	141161	0	0	0	0	0	0	141161	2009
Number enrolled in SCHIP	60937	0	0	0	0	0	0	60937	2009
Number living in foster home care	7498	0	0	0	0	0	0	7498	2009
Number enrolled in food stamp program	587892	0	0	0	0	0	0	587892	2009
Number enrolled in WIC	214234	0	0	0	0	0	0	214234	2009
Rate (per 100,000) of juvenile crime arrests	1801.2	0.0	0.0	0.0	0.0	0.0	0.0	1801.2	2009
Percentage of high school drop-outs (grade 9 through 12)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2008

Notes - 2011

Population estimates of the US Census (2009).

2008 PR Community Survey, US Census.

Provided by the PR Family Department. Data for CY was not available. Same data from last year (2008).

Data for 2009 provided by the PR Health Insurance Administration (ASES).

Data for 2009 provided by the PR Health Insurance Administration (ASES).

Data for 2009 provided by the PR Family Department.

Data for 2008-2009 provided by the WIC Program of the PR Department of Health.

Data for 2009 provided by the PR Police Department.

Data for 2007-2008 provided by the PR Department of Education.

Data for 2008-2009 provided by the PR Family Department.

Narrative:

The state of health of a population is affected by social, environmental, behavioral, as well as economic determinants. Adverse health outcomes disproportionately affect infants and children in foster care or in single-parent homes.

As mentioned in the HSI 6A, the 2000 Census and 2007 PRCS data; report that white race predominates in PR. However, we are certain that the information under race classification reported in the PRCS and the Census is biased for two main reasons. First, the question does not include other racial categories used by Puerto Ricans. Second, there is a social stigma attached to being black among Puerto Ricans. In spite of this, there is not a significant disparity in race in the Island. For this reason, we will not make a distinction by race when describing the 0-19 years old population.

According to US Census Bureau, PR had a total of 3,808,610 inhabitants in 2000. About 32% (1,219,804) were children and adolescents up to 19 years old. For 2008, the PRCS reported that about 28% infants and children (1,107,131) were living in the Island. This represents a 9% reduction in the population in this age category when compared to that of 2000.

In 2008, there was a slight increase of 1.4% of infants and children in households headed by single parents compared with 2007. For FY 2008-2009 the number of families in the TANF Program was 45,665. For this FY is not possible to calculate the percent of families with children up to 19 years old because the PRDOF did not provided this information.

The Medicaid and SCHIP enrollments decreased 19.8% in 2009 compared with 2008. The number of infants and children enrolled in the WIC Program also revealed an increase of 8.7%. The number enrolled in the food stamp program showed a significant increase of 42% between 2008 and 2009. During their daily activities CHW's, HVN's and Perinatal Nurses in the eight Health Regions educate parents on the content of adequate pediatric care encouraging them to demand it for their children. Likewise, Medicaid staff promotes the same message when they participate in activities and health fairs. During these activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.

The WHO identifies educational or literacy levels one of the socioeconomic factors that can affect the health conditions of the population. In PR, the reported percentage of high school dropouts continues increasing (1.12% in 2008 vs. 1.0% in 2007). It is well known that leaving high school before graduation can lead to continued poverty and a higher incidence of juvenile arrests. The rate of juvenile crime arrests in 2009 was 1,801/100,000 inhabitants; about 1,776 arrests less than in 2008.

The Youth Health Promoters of the MCAH Program developed activities through positive youth development initiatives to raise awareness among their school peers of health related issues and the importance of completing an education.

Health Status Indicators 09B: *Infants and children aged 0 through 19 years in miscellaneous situations or enrolled in various State programs enumerated by Hispanic ethnicity.*
(Demographics)

HSI #09B - Demographics (Miscellaneous Data)

CATEGORY	Total NOT Hispanic or Latino	Total Hispanic or Latino	Ethnicity Not Reported	Specific Reporting Year
Miscellaneous Data BY HISPANIC ETHNICITY				
All children 0 through 19	0	1094273	0	2009
Percent in household headed by single parent	0.0	44.2	0.0	2008
Percent in TANF (Grant) families	0.0	24.0	0.0	2008
Number enrolled in Medicaid	0	141161	0	2009
Number enrolled in SCHIP	0	60937	0	2009
Number living in foster home care	0	7498	0	2009

Number enrolled in food stamp program	0	587892	0	2009
Number enrolled in WIC	0	214234	0	2009
Rate (per 100,000) of juvenile crime arrests	0.0	1801.2	0.0	2009
Percentage of high school drop-outs (grade 9 through 12)	0.0	1.1	0.0	2008

Notes - 2011

Population estimates of the US Census (2009).

2008 PR Community Survey, US Census.

Provided by the PR Family Department. Data for CY was not available. Same data from last year (2008).

Data for 2009 provided by the PR Health Insurance Administration (ASES).

Data for 2009 provided by the PR Health Insurance Administration (ASES).

Data for 2009 provided by the PR Family Department.

Data for 2008-2009 provided by the WIC Program of the PR Department of Health.

Data for 2009 provided by the PR Police Department.

Data for 2007-2008 provided by the PR Department of Education.

Data for 2008-2009 provided by the PR Family Department.

Narrative:

Since the major ethnic group in PR is Puerto Rican, followed by Dominicans and Cubans, all of them Hispanic (99%), the information presented in the HSI 9A is the same for this HSI.

Please refer to the HSI 9A for the discussion of this health status indicator.

Health Status Indicators 10: *Geographic living area for all children aged 0 through 19 years.*

HSI #10 - Demographics (Geographic Living Area)

Geographic Living Area	Total
Living in metropolitan areas	1032994
Living in urban areas	889644
Living in rural areas	204629
Living in frontier areas	0
Total - all children 0 through 19	1094273

Notes - 2011

Narrative:

According to the information provided by the 2000 US Census, the population density was estimated at an average of 1,080 persons per square mile. However, some metropolitan areas

may have almost 10,000 persons per square mile. In 2008, the PR population density increased 6.9% when compared to 2000, reaching an average of 1,155 persons per square mile. We estimate the percent of children up to 19 years living in metropolitan, urban and rural areas using the distribution for all individuals in Puerto Rico for 2008. Based on this estimate, about 889,644 infants, children and adolescents up to 19 years lived in metropolitan areas. This represents a slight reduction compared with the 2007 report. The same reduction is estimated for the population 0-19 years living in urban and rural areas. It is important to mention that the population in Puerto Rico is decreasing and the information for 2008 is an estimate.

Research conducted by the TV Monitoring and Evaluation Unit evidenced the health disparities between urban and rural areas. People living in rural areas have more adverse health outcomes. In order to help this population to overcome their health problems, the MCH Program provides educational services, coordinates health fairs and gives referrals to other programs.

Health Status Indicators 11: *Percent of the State population at various levels of the federal poverty level.*

HSI #11 - Demographics (Poverty Levels)

Poverty Levels	Total
Total Population	3967179.0
Percent Below: 50% of poverty	25.0
100% of poverty	44.8
200% of poverty	73.2

Notes - 2011

2009 population estimates.

Provided by 2008 PR Community Survey (Table S1701).

Provided by 2008 PR Community Survey (Table S1701).

Provided by 2008 PR Community Survey (Table S1701).

Narrative:

The 2008 PR Community Survey (PRCS) reported that there are 3,907,696 individuals in Puerto Rico for whom the poverty level was determined. Of this population, 25% are below 50% poverty level, 44.8% are 100% below poverty level and 53.5% below 125% poverty level. Currently, there is no data available about how many persons are below 200% poverty level.

In terms of gender, in 2005, about 47% of females were below poverty level, compared with 43% of males. For 2008, only the females had a decrease of 1 percentage point (46%), while the men remained at the same level. This data evidences that there are more women than men living in poverty. In 2005, 56% of children under 18 years old lived below the poverty level in PR. In 2008, this percent remains the same, 56%.

The 2008 ESMIPR (PRAMS-like survey) results revealed that among mothers who reported their annual family income, 45.7% had an income less than \$10,000; 21% (\$10,000-\$19,999); 18.4% (\$20,000-\$39,999), and 15.0% reported an annual income higher than \$39,999. The average number of family members depending on that income was four.

Slightly more than 4 in 10 surveyed mothers (42.1%) reported that they were employed outside the home. This data contrasts with 2006 ESMIPR results, which found that among mothers who reported their annual family income, about 41.5% had an income less than \$10,000; 24.8% (\$10,000-\$19,999); 20.4% (\$20,000-\$39,999), and only 13.2% reported an annual income higher than \$39,999. The average number of family members depending on that income was four. Fewer than 4 in 10 surveyed mothers (41.4%) reported that they were employed outside the home.

The data reveals that there was an increase, although not a significant one, for those mothers with an annual family income less than \$10,000 and those with incomes higher than \$39,999. On the other hand, fewer mothers had annual family incomes between \$10,000 and \$19,999.

Due to the economic recession, it is expected that the population below poverty level will increase during this current year.

The MCH Program will be evaluating, through the needs assessment, the priority needs of this population. Currently, the MCH Program focuses on identifying both governmental and non-governmental agencies to coordinate services in order to bring the best services and contribute to a healthier quality of life.

Health Status Indicators 12: *Percent of the State population aged 0 through 19 years at various levels of the federal poverty level.*

HSI #12 - Demographics (Poverty Levels)

Poverty Levels	Total
Children 0 through 19 years old	1084508.0
Percent Below: 50% of poverty	36.4
100% of poverty	56.4
200% of poverty	63.9

Notes - 2011

2009 population estimates (IDB).

Provided by 2008 PR Community Survey.

Provided by 2008 PR Community Survey.

Provided by 2008 PR Community Survey. The 200% of poverty was determined by the 125% of poverty.

Narrative:

According to the 2005 Puerto Rico Community Survey, 55% of children under 18 years old were below the poverty level. In 2008, this percent shows a slightly increase to 56.4%.

When we observed the families in PR, 41% of all families and 59% of families with a female householder and no husband present were below poverty level for 2008. However, there is a significant increase when there are children in the family.

In 2008, PRCS reported that 50% of all families and 68% of families headed by a female without a husband present and with children under 18 years old were below the poverty level.

Furthermore, female-headed families without a husband present and with children were poorer than married-couple families. For 2008, the married-couple families with children below poverty level were 34% compared with 68% families with a female householder and no husband present.

On the other hand, there were 966,283 children for whom poverty status was determined in 2008. Of this, 36.4% were children below 50% of poverty level, 56.4% were under 100% of poverty level and 63.9% were below 125%. This means that the number of poor children in Puerto Rico increases as the percent of poverty level increases.

As a result of the economic recession, it is expected that the children below poverty level will increase for this current year (2009).

The disparity in families with children under 18 years of age headed by a female and without a husband present is evident. MCH Program is providing information and education through the HVP and CSW in every region for all those families, targeting particularly those with a female householder. In collaboration with "Nido Seguro", a Home Visiting Program of the PR Department of the Family, we are covering more geographical areas in an effort to impact more people in need.

F. Other Program Activities

Direct Services

The MCH Division provides a variety of contraceptive methods to women of childbearing age (WCBA) participants of the GIP as well as the prenatal Rhogam vaccine recommended at 28 weeks gestation for those Rh negative non-sensitized pregnant women. During FY 2008-2009, a total of 7,255 WCBA (unduplicated) received contraceptives; 17,023 methods were distributed. Also, 1,385 Rhogam vaccines were supplied to participants of the GIP during this period.

During FY 2008-2009, the Pediatrics Centers (PCs) provided health services to 6,444 children with special health care needs.

MCH staff participated in the planning and execution of strategic plans to vaccinate pregnant women and children up to 24 years of age in the massive campaign against Influenza A H1N1 Virus during November 2009. The MCH HVNs participated actively across the Island. As of June 21, 2010, 575,651, persons including 3,107 pregnant women and 227,377 person between the ages of 6 months to 21 years of age received the vaccine.

Enabling Services

The PRDOH is required by law to have a toll-free line (1-800-981-5721) to provide orientation to the public regarding health care and other services and how to access them. The PRDOH Office of Informatics and Technological Advances (OITA) is in charge of the Toll Free line services after Data Voice Solutions agreement was not renovated in 2008 due to breach of contract. The Toll Free line is available but OITA cannot provide us the exact number of calls received from the MCH population. ASES as well as all health insurance companies contracted by the HCR are required to operate a toll-free line for their recipients. Other organizations that provide services for MCH population have toll-free lines available to respond to their needs. Following are several of these toll-free lines for clients and service providers:

ASES: 1-800-981-2737

Triple C: 1-800-981-1352; 1-800-255-4375

MCS: 1-800-981-2554

Humana: 1-800-790-7305

First Medical (International Medical Card): 1-888-318-0274
Patient's Advocate Office (Ombudsman): 1-800-981-0031
PR LACTA: 1-877-775-2282
APNI: 1-800-081-849
Poison Center: 1-800-222-1222

The MCH staff reported receiving 908 calls for orientation on diverse MCH issues and for data requests. The Home Visiting Program received 8,530 calls for orientation and other services. On the other hand, 2,039 calls for orientation were received by APNI through their toll-free line.

The social worker funded by Title V funds who is offering services at the Sexual Assault Victim Center (CAVV, Spanish acronym) reported receiving 179 calls for orientation and other services during this period.

Population Based

* MCH regional staff offered 11,580 educational activities on MCH topics to 176,688 persons. Our staff participated in 4 radio or TV programs and wrote one article in local magazine covering a variety of MCH related topics. Staff at regional level also took part in 291 health fairs and multiphase clinics reaching 20,642 participants.

*In 2009, the local Healthy Start Project Participants' Committee convened 69 times; 858 persons participated. The 5th Healthy Start Project Participants' Gathering was held with the participation of 327 consumers and families.

*During FY 2008-2009, the Naranjito Adolescent Program continued promoting the PYD model in its community. A total of 224 youths and 58 adults in three school settings participated in health workshops by youths to peers, parents, and adults and other activities to promote PYD in their communities.

Infrastructure Building

The MCH Division performs assessment, data analysis, training events and other activities in an ongoing manner.

*The PR Rotary Club continues being a sponsor of educational activities intended for improve infant health, mainly those related to Infant Mortality.

*The PR ECCS Project continued collaborating as a member of a working group convened by the Governor's Office to give recommendations to the Governor regarding the establishment of a state Advisory Council to address early childhood issues and services. Also, the Third Conference on Early Childhood, carried out in May 2010, emphasized on the socio-emotional development and mental health of the early childhood population and their families.

The MCH staff had a presentation about the prevalence of obesity in children in Puerto Rico during the Summit on Smoking and Obesity Prevention held in March 2010. Also, the MCH Director participated with a presentation on the MCAH Status in PR in a three- day DHHS Region II Conference held at a local hotel on March 23-25, 2010.

The MCH staff collaborated with the PRDOH in the preparation of written recommendations for 58 legislative bills that deal with maternal, child and adolescent health issues in 2009 and 11 so far in 2010.

*The PRDOH Breastfeeding Promotion Committee, within the MCH Division, collaborated actively with LACTA Project, one of its members, to implement a strategy called "The Management Case for Breastfeeding", a federal-funded initiative sponsored by DHHS and MCHB. The main goal is to elicit the willingness of private entities in PR to provide a breastfeeding-friendly environment for women at their workplace. The PR HS Project is participating in the implementation process.

G. Technical Assistance

States and jurisdictions were in the process of elaborating the comprehensive and mandated five years needs assessment for the 2010-2015 period required by the Title V proposal. As a result of new administrative procedures at the PRDOH, the yearly rehiring process of personnel under contract at the MCH Division was delayed, provoking the delay also of the needs assessment process. Nevertheless, personnel resumed functions readily to make up for the time delay. No technical assistance was requested at the time for this reason. However, we will request a technical assistance to help us improve the Strategic Plan related to this Needs Assessment.

The rate of premature births in PR is the highest in the nation. With the intention of identifying risk factors in Puerto Rico that may be contributing to this elevated prematurity rate and to develop a strategy directed to improve this health indicator in the Island, in 2007 the MCH Division became a member of the Puerto Rico Prematurity Taskforce (PRPT). The Taskforce analyzed Vital Statistics data from 1990 to 2004 to detect risk factors that could explain this phenomenon, but the results did not succeed in pointing at any cause usually mentioned as contributory (e.g.: maternal age, education and lifestyle, prenatal care).

Premature and LBW births are the leading causes for infant mortality in Puerto Rico. Therefore, determining preventable or modifiable risk factors for premature births is one of our greatest main concerns. For that reason, the MCH Division requests a technical assistance to help us perform an in-depth analysis of this health situation and identify those risk factors that may be reduced or eliminated and improve our premature births rates.

The Title V Application and Annual Report Guidance requires that States report progress in reaching the established annual performance indicator for each of the 18 National Performance Measures, all the State Negotiated PMs (8 in PR), 15 HSCIs and other health status and socio-demographic indicators and 6 outcome measures. Those jurisdictions with limited resources view this as a great challenge aside from the fact that at the same time are left out of national surveys that provide the data for some of the PMs.

On the other hand, the Hospital Discharge Survey is one of the data sources used to report the progress towards achieving annual objectives for Health Status Indicators (HSI) and Health System Capacity Indicators (HSCI). This survey provides data for HSI 4A: the rate of non fatal injuries in children of 14 years of age and older; HSCI 01: the rate of hospitalizations among children 0-4 years due to bronchial asthma; and HSCI 9A: the ability of the MCH program to obtain data for program planning or policy purpose in a timely manner. The Hospital Discharge Survey is carried out annually by the National Center for Health Statistics, and collects medical and demographic information from a sample of discharge records selected from a sample of hospitals. The information collected serve as a basis for calculating statistics on hospital utilization related with preventable conditions such as those described above.

Territories and jurisdictions with limited resources that do not participate in these national surveys meet a great challenge when reporting data on these indicators. To cope with this, the Puerto Rico Department of Health is requesting a technical assistance in order to obtain quality and timely data needed to report on these HIS and HSCI. It will allow us to initiate the planning phase for the PR Hospital Discharge Survey Project. We will adapt and tailor the survey to our local needs and language specifications. The assistance of key personnel from the National Center for Health Statistics will increase our ability to have data to monitor our progress toward improving the health and wellbeing of our target population. For these purposes, we intend to submit a formal request for this technical assistance and begin our planning phase during this current year.

V. Budget Narrative

Budget and expenditure data from Forms 3, 4, and 5 are provided for the application year, interim year, and reporting year to assist the reviewer in analysis of the budget and expenditure narrative. For complete financial data, refer to all the financial data reported on Forms 2-5, especially when reviewing the federal allocation on Form 2 for the 30%/30%/10% breakdown for the budgets planned for primary and preventive care for children, children with special health care needs, and administrative costs.

Form 3, State MCH Funding Profile

	FY 2009		FY 2010		FY 2011	
	Budgeted	Expended	Budgeted	Expended	Budgeted	Expended
1. Federal Allocation (Line1, Form 2)	16278600	16278600	16052712		16050025	
2. Unobligated Balance (Line2, Form 2)	521050	521050	3512301		0	
3. State Funds (Line3, Form 2)	12599738	12599738	14673760		12037519	
4. Local MCH Funds (Line4, Form 2)	0	0	0		0	
5. Other Funds (Line5, Form 2)	0	0	0		0	
6. Program Income (Line6, Form 2)	476739	476739	233179		234092	
7. Subtotal	29876127	29876127	34471952		28321636	
8. Other Federal Funds (Line10, Form 2)	8843043	8843043	6152516		6491008	
9. Total (Line11, Form 2)	38719170	38719170	40624468		34812644	

Form 4, Budget Details By Types of Individuals Served (I) and Sources of Other Federal Funds

	FY 2009		FY 2010		FY 2011	
	Budgeted	Expended	Budgeted	Expended	Budgeted	Expended
I. Federal-State MCH Block Grant Partnership						
a. Pregnant Women	4237240	4332765	4930002		4007495	
b. Infants < 1 year old	4237240	4332766	4930002		4007495	
c. Children 1 to 22 years old	9886893	9878210	11503338		9350821	
d. Children with	9886894	9704526	11503339		9350823	

Special Healthcare Needs						
e. Others	0	0	0		0	
f. Administration	1627860	1627860	1605271		1605002	
g. SUBTOTAL	29876127	29876127	34471952		28321636	
II. Other Federal Funds (under the control of the person responsible for administration of the Title V program).						
a. SPRANS	0		0		0	
b. SSDI	94644		94644		93713	
c. CISS	140000		105000		140000	
d. Abstinence Education	2537208		0		0	
e. Healthy Start	500000		500000		500000	
f. EMSC	0		0		0	
g. WIC	0		0		0	
h. AIDS	0		0		0	
i. CDC	445863		525050		640000	
j. Education	4968329		4777823		4817296	
k. Other						
UNHS	149999		149999		299999	
March of Dimes	7000		0		0	

Form 5, State Title V Program Budget and Expenditures by Types of Services (II)

	FY 2009		FY 2010		FY 2011	
	Budgeted	Expended	Budgeted	Expended	Budgeted	Expended
I. Direct Health Care Services	17157746	17177510	20151964		16347942	
II. Enabling Services	3744078	4784431	5282553		4517467	
III. Population-Based Services	2441790	2410152	2739102		2213298	
IV. Infrastructure Building Services	6532513	5504034	6298333		5242929	
V. Federal-State Title V Block Grant Partnership Total	29876127	29876127	34471952		28321636	

A. Expenditures

Completion of Budget Forms

Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2008-2009. Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels.

Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years.

B. Budget

Program allocations have taken into account the 30-30-30-10 requirements established by Title V. Efforts are made to match funds according to the identified needs through the four levels of the MCH pyramid, as well as the three groups of individuals that comprise the target population.

Puerto Rico assures that the MCH funds are used for the purposes outlined in the Title V, Section 505 of the Social Security Act. Traditionally, a fair method has been used to allocate Title V funds among individuals and geographic areas having unmet needs. The fair allocation of funds is guided by an Integrated Index of Maternal and Infant Health Status (IIMIHS) developed by the MCH Division to assess the health needs of the target population by municipality (Table II-1). One of the benefits of using this Index is that the information necessary to evaluate each of its variables is available on an ongoing basis through analysis of birth and death files. The Division of CSHCN allocates Title V funds guided by the needs assessment's findings and the national and state performance measures.

A total of 35% of Title V Block Grant Funds is allocated for the CSHCN program. Fifty-nine percent (59%) of funds are allocated in the Direct Service Pyramid Level. This includes salaries and benefits of the staff, specialists and sub specialists professionals' service contracts, special formulas, devices and Central level MCH Staff. The other five percent (5%) is used to cover the administrative costs for the central level and the seven Pediatric Centers.

As of June 2010, the MCH Division has 76 Home Visiting Nurses, 44 Community Health Workers, 8 Perinatal Nurses and 3 Health Educators across the Island. At the regional level we have eight teams. Most teams are comprised of the regional MCH director, coordinator of maternal and infant health services, coordinator of preventive services for children, coordinator of adolescent health services, and administrative support staff. At the central level we have 22 regular positions and 6 contracts. Contract positions paid with Title V funds include a Biostatistician, two Epidemiologists, one Evaluator, one Anthropologist, one Physician and one Genetic Counselor.

At Central level, the CSHCN Section has a total of 19 positions: 16 regular positions and 3 contracts. Contract positions include an Evaluator, an Information System Administrator and an Epidemiologist. At Regional Level, the CSHCN Section has a total of 165 positions: 120 regular positions and 45 contracts. In total, 182 positions are paid with Title V funds.

Allocations by Levels of the Pyramid:

Direct Services: Previously, the MCH funds were assigned to the purchase of contraceptive methods to support the family planning services rendered through the health care reform for women holding the GIP. This service provided by MCH has been affected by the reduction of funds, the increase in costs of contraceptive methods, and the legislated salary raise for nurses and the PRDOH Personnel Reclassification Plan implemented in July 2007. Even though family planning services, including sterilization of males and females, are included in the GIP, contraceptive methods are not included in the benefit package.

The needs of CSHCN identified through the needs assessment support our efforts to make specialized services available through the Pediatric Centers. The Metropolitan Area Pediatric Center, administratively under the Pediatric University Hospital for the past ten years, remains a supra tertiary referral center and provides services not available at the regions for children and families referred by the other six Pediatric Centers. The Metropolitan Area Center offers a wide variety of sub-specialized services to our population. This includes the salaries of the seven Pediatric Centers including medical specialists, sub specialists and allied health professionals, as well as special formulas for CSHCN over 5 years of age with metabolic disorders. Prosthetic and

orthotic devices are partially funded according to payment capacity as determined by the Medical Assistance Office.

Enabling Services: A significant amount of Title V funds from this level is needed to support salaries, local travel and uniforms expenses for the 76 Home Visiting Nurses and 8 perinatal nurses. The HVNs are specially trained public health nurses who provide health education and coordinate services through referrals to the appropriate private and public entities in their communities. At this pyramid level funds are allotted to cover expenses for the Toll-Free Information Line to disseminate the services provided by CSHCN and MCH, and for an additional information line about services available at the Pediatric Centers. Also, part of these funds is set aside to support a community based organization that promotes adolescent health.

Eight (8) registered nurses and one (1) social worker provide care coordination services to CSHCN at the Pediatric Centers. Four (4) of these are paid with Title V funds and are included in this level; the other five (5) are paid with state funds.

Population-Based Services: Title V funds are used to maintain the NTD prevention campaign, folic acid consumption campaign, injury prevention, and the salaries and local travel expenses of the health educators. These funds are also used to purchase educational materials according to the performance measures and incentives that promote the toll-free line and convey a wide array of health promotion messages. The salaries for the staff of the Comprehensive Adolescent Health Program (CAHP), including a physician and the social workers are assigned to this pyramid level. The 45 Community Health Workers in the eight regions as well as their local travel expenses are allocated at this level. The Community Health Workers have the responsibility to identify pregnant women and children outside the health care system and facilitate their enrollment in the GIP, as well as providing educational activities at the community level.

Infrastructure Building Services: To sustain the infrastructure of MCH/CSHCN programs, funds are used for the salaries of central and regional administrative staff. This area developed in the MCH Division is comprised by a team of skilled public health professionals including a Biostatistician, Epidemiologists, and Evaluators, among others. Funds are also invested for the needs assessment and other core functions, equipment, professional development, the purchase of computers, e-mail and informatics system maintenance, support for applied research and surveillance. All travel expenses required to attend meetings, conferences and trainings in the mainland, and other related activities are paid with these funds.

State dollars used to provide services to the MCH population surpasses many times the requirements for the match. State funds appropriations are used for the GIP and the implementation of a broad array of programs and services that contribute to improve the health and well being of the MCH population. Table V-1 presents a list of several programs supported by State dollars.

In addition to MCH dollars and the State funds listed in Table V-1, there are other federal sources of funds that contribute to the achievement of the MCH outcomes. These are included in Form #2.

Budget documentation: The Fiscal Affairs Office of the Department of Health and the Office of Federal Affairs maintain budget documentation for Title V funding and expenditures consistent with Section 505(a)(1).

Allocations for FY 2010-2011: The estimated amount of money to run the MCH/CSHCN programs during FY 2010-2011 is as follows:

Federal: \$16,050,025.00
Unobligated: \$0.00
(FY 2009-2010)

State Matching: \$12,037,519.00
Program Income: \$234,092.00
Total: \$28,321,636.00

In case of an estimated unobligated balance, it will allow us to continue running both MCH/CSHCN programs during the first trimester of FY 2010-2011, since the funds herein requested are not available until late November or early December of the fiscal year.

Allocation by MCH Population Groups:

- A) \$4,815,007 (30%): for the provision of services to pregnant women, mothers and infants.
- B) \$4,815,008 (30%): for the provision of preventive services for children.
- C) \$4,815,008 (30%): for the provision of services to CSHCN.
- D) \$1,605,002 (10%): From this amount, 5% is for program administration of Components A and B; and 5% for administration of the CSHCN program.

Administration: Up to 10% of the federal allocation is used to support salaries and benefits of administrative staff, internal audits, newspaper advertisements, office supplies, document reproduction, mailing, AMCHP annual membership and others. The CSHCN Program covers part of its administrative costs from the 35% allocated from the MCH Block Grant.

Other Requirements

Maintenance of Efforts: Puerto Rico is in compliance with maintenance of effort requirements as described in Section 505(a)(4). In fact, PR exceeded efforts of the 1989 program year. As of December 2009, ASES reported that 1,464,671 individuals of all ages and both sexes were covered by the GIP in Puerto Rico. Among these, 417,292 were women 15-49 years of age, 33,949 were infants <1 years of age, and 586,601 were children 1-19 years old, including CSHCN.

During the FY 2008-2009, of all individuals holding the GIP, the MCH population represented 63.43%. The annual cost per person was \$1,290.72 (\$107.56 per month). Table V-2 summarizes the funding sources provided by the State to pay for the health services of the population holding the GIP.

Considering that 63.43% (929,075) of the beneficiaries of the GIP represent the MCH population, it is estimated that PR invested over \$1,199,175,684 in state and local funds to pay for the MCH services. We assume that 33%, or \$395,727,976.00, were invested in preventive and primary services for the MCH population. In addition, about \$192,633,708.00 of Medicaid and \$48,009,000.00 of SCHIP were also used for this segment of the population. Several earmarked state funds allocated for special services and programs were also identified. These include \$1,038,000.00 for the Pediatric AIDS program, \$198,000 for the Newborn Screening for Hereditary Diseases Program, \$90,000 for the EMSC program, and \$5,176,631.00 to support 51 children and adolescents with Catastrophic Illnesses, totaling \$ 6,502,631.00. Definitely, the Commonwealth of Puerto Rico surpasses the matching requirements of Title V. (Table V-1).

An attachment is included in this section.

VI. Reporting Forms-General Information

Please refer to Forms 2-21, completed by the state as part of its online application.

VII. Performance and Outcome Measure Detail Sheets

For the National Performance Measures, detail sheets are provided as a part of the Guidance. States create one detail sheet for each state performance measure; to view these detail sheets please refer to Form 16 in the Forms section of the online application.

For the detail sheets and objectives for the state performance measures developed from the 2010 needs assessment, refer to TVIS Forms, Form 11 and Form 16 under the section "New State Performance Measure Detail Sheets and Data."

VIII. Glossary

A standard glossary is provided as a part of the Guidance; if the state has also provided a state-specific glossary, it will appear as an attachment to this section.

IX. Technical Note

Please refer to Section IX of the Guidance.

X. Appendices and State Supporting documents

A. Needs Assessment

Please refer to Section II attachments, if provided.

B. All Reporting Forms

Please refer to Forms 2-21 completed as part of the online application.

C. Organizational Charts and All Other State Supporting Documents

Please refer to Section III, C "Organizational Structure".

D. Annual Report Data

This requirement is fulfilled by the completion of the online narrative and forms; please refer to those sections.